

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report January 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**February 10, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (January 1st - January 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests.

#### *Work Planned (February 1st - February 28th)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

- Purchase a year service for One Drive for storing BAS DB backups for quick access by the DR site.

*Work Performed (January 1st - January 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, and update or create action items based on info that came out of the meetings.
- Disaster Recovery update meeting held with EPA.
- Gathered current information on all BAS-related servers and processes to update the system characterization document for FY 2015.
- Started to review the BFS DR plan.

*Work Planned (February 1st - February 28th)*

- KeyLogic will continue to obtain and store BAS database backups.
- Respond to all EPA requests for security and disaster recovery support.
- Follow up on action items from Disaster Recovery meeting.
- Finalize the process for EPA Oracle backups.
- Continue adding info to the DR plan.
- Continue to refine the backup and restore process.
- Review/revise the BFS DR plan.

**Subtask 1.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Need a decision from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

*Work Performed (January 1st - January 31st)*

- KeyLogic responded to EPA requests for BAS enhancements, including:
  - Added 2 intermediate tables to hold a subset of allocation data to improve reporting performance in running complex queries used to create the CJ.
  - Added a new procedure that could be called to refresh the intermediate table data when data was updated or allocation breakouts were recalculated.
  - Duplicated the BAS front end report view using a different name and adjusted it to use the intermediate tables so that macro reports ran in several minutes verses times in some cases over an hour.
  - Assisted users in figuring out issue with Version Status screen cutting off buttons. The screen layout was modified/resized.
  - Assisted users with running ESP Allocations and corresponding reports.
  - Fixed the issue with NPM users unable to enter AH ‘9R’ like data.

- Assisted users with Security locking/unlocking data for PERS.
- Fixed the issue with 'Allocated Other' report when 6 or more groups are selected.
- Modified Payroll module security so Superuser can see other users 'Private' Base Costs and Scenario's per Jackye Herzfeld's request.
- Created spreadsheets for Users/Security rights to Resources and other modules.

*Work Planned (February 1st - February 28th)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.

### **Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (February 1st - February 28th)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

### **Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

None

*Work Planned (February 1st - February 28th)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

## **Subtask 1.8 Documentation**

### *Client Actions/Decisions Required*

None

### *Work Performed (January 1st - January 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

### *Work Planned (February 1st - February 28th)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to Keylogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

## **Subtask 1.9 - Database Security**

### *Client Actions/Decisions Required*

None

### *Work Performed (January 1st - January 31st)*

None

### *Work Planned (February 1st - February 28th)*

- Maintain BAS database security as necessary.

## **Subtask 1.10 - BAS System Integration with Other Administrative Systems**

### *Client Actions/Decisions Required*

- Response on change request to allow partial reprograms to be loaded to Compass.

### *Work Performed (January 1st - January 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Participated in a meeting regarding possible changes to BAS on the implementation of the requirements for Compass version 7.2. It was concluded that Reprogramming data upload will have to be modified.

### *Work Planned (February 1st - February 28th)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Continue supporting BAS-Compass interface activities.
- Support on pushing data to Compass:
  - Implement changes in BAS files feeding Compass, as necessary info is made available.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

Need response on copying bids from one FY to another with the same strategic plan.

#### *Work Performed (January 1st - January 31st)*

- Continued providing ACS/PERS miscellaneous support:
  - Support in PERS security – locking /unlocking multiple versions for data entry.

#### *Work Planned (February 1st - February 28th)*

- Continue enhancing ACS/PERS functionality and assisting in ACS/PERS data analysis as requested.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation.
- Decision pending on adding the ability to copy Bids across FY within the same Strategic Plan.
- Continue analyzing and discussing ACS/PERS conversion from Strategic Plan 5.0 to Strategic Plan 6.0, as needed.

### **Subtask 2.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (January 1st - January 31st)*

None

#### *Work Planned (February 1st - February 28th)*

None

### **Subtask 2.7 Training**

No activity during the reporting period.

### **Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

- Continued modifications to the ACS/PERS modules users guides, as necessary.

*Work Planned (February 1st - February 28th)*

- Continue efforts to develop and revise system documentation as time and priorities permit.

## **Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Statement of Net Cost, Hill Monthly, and Exhibit 53 reports.
- Continued working on maintenance and infrastructure tasks such as Olapdev space and BAS SQL Server issues, partitioning and cleanup.
- Completed several loads of applied data into 2015 ACT 15.2.
- Continued support for maintenance such as changing passwords on different servers, restarting them, installing updates.
- Continued supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports as requested.
- Continued support for reporting for Targeted, Applied and Retired Employees.

*Work Planned (February 1st - February 28th)*

- Continue to support budget/finance related reports, as requested by client.



- Continue supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports.
- Continue processing data from spreadsheets as needed.

#### **Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

None

*Work Planned (February 1st - February 28th)*

- Support OCFO staff as requested.

#### **Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (January 1st - January 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - General (Multiple Contact Points)
    - More discussion about what will happen with Lotus Notes server once OA is gone.
  - 2015 OCFO Recertification DB (Pat Wingfield)
    - Talked with Pat briefly. She has to update the list of approvers and then will have KL push them out to production.
  - Budget Submissions/CJ DB (Jackye Herzfeld)
    - Some support of the process for the merge and index creation.
  - RPROS: Data Call and Response Database (Talitha Lindo)
    - Worked with RPROS folks to locate a problem with creating responses. This was related to the user's documents folders being mapped incorrectly (to the administrator's folder).
  - RPROS: Hill Highlights Database (Deon Moore)

- Helped Deon change the year of the database on the menu via the setting in the database profile.

*Work Planned (February 1st - February 28th)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Assist with completion of Lotus Notes to SharePoint conversion questionnaires when needed.
  - OCFO Recertification DB – Updates to the new workflow process if needed.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

*Work Planned (February 1st - February 28th)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

*Client Actions/Decisions Required*

None

*Work Performed (January 1st - January 31st)*

- Continued providing routine project management oversight, including developing monthly technical and cost reports.
- Continued administering and managing databases/applications on OCFO's servers in the W.J. Clinton building.
- Installed and configured Symantec Antivirus Enterprise on OCFO-OB servers. These servers had no antivirus installed and we were given directive from OEI to bring them into compliance.
- Configured Big Fix agents to fall under the OCFO Las Vegas management group. Vegas will manage these endpoints until we get Big Fix console access.

- Switched out broken monitor stand for James with extra one we had.
- Explored group policy configurations that are applied to OCFO computers.
- Assisted with Citrix licensing.
- Investigated disabling of SSL 3.0 and use of TLS 1.0 for Citrix connections.  
Determined what must be implemented to make the change however unable to test without remote access. Testing must be done late at night during non-business hours.
- Microsoft support for Windows Server 2003 is ending in July 2016. The servers that use this OS is:
  - BAS application server / file server
  - SQL Server 2000 server
- Lotus notes server is reaching end of life in April 2015. Need to determine where this will be hosted until apps migrated out of Lotus Notes to new platform.
- Request for Symantec Antivirus Management console access in progress.
- Request for Big Fix console access in progress.
- Request for Big Fix custom reports access in progress.
- Request for AAA token in progress.

*Work Planned (February 1st - February 28th)*

- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Continue tweaking the Offsite Disaster Recovery process. Provide test plan at end of month.
- Fully automate process of splitting BAS dump (backup) file into multiple volumes, uploading to OneDrive, and downloading/reassembling volumes to KeyLogic site. Also included with this effort is automated reporting on success or failure of daily job.
- Continue creation of server management scripts.
- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Obtain Symantec Antivirus Management console access.
- Obtain Big Fix console access.
- Obtain Big Fix custom reports access.
- Obtain AAA token.
- Work on Lotus Notes server hosting and application platform migration.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

*Client Actions/Decisions Required*

- Finalize ACS code structure and column dependencies.

*Work Performed (January 1st - January 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of EPA's and other available Cloud service offerings.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4.
  - Met with EPA and modified configuration management plan in response to EPA comments.
  - Responded to EPA in reference to SLCM procedure requirements regarding training plan content requirements and BFS Requirements Traceability Plan.
  - Provided for internal use documents for the System and Security Test Plan and documents in support of BFS deployment outside EPA.
- Design and Review meetings
  - Participated in numerous meetings for different modules such as Bulk Data Operations, new ACS code structure for RDE and reports.
  - Participated in numerous discussions on Program Area Congressional reports, ACS changes, data-issues and ETL.
  - Continued to work on the design, implementation and data flow of Security.
  - Continued participating in numerous discussions on implementing PRC like data structures and how to set up the relationships needed between the columns.
  - Continued on design of structure to allow the building of data models for the metadata driven report process.
  - Continued on design approach to pick lists in reports.
  - Designed approach to bulk procedures so that version bulk processes and modeling bulk processes will use the same design.
  - Designed Metadata approach to capturing column selection for modeling and bulk version processes.
  - Continue work on the design, implementation and data flow of the Change Tracking process.
  - Continued working on Design of an approach to multiple fact resource templates.
  - List of questions was prepared and sent to the client for Modeling Module, several meetings took place.
  - Data Requirements and Estimate documents created for Modeling Module.
  - Design on a pattern based approach to managing Metadata.
  - Worked on the following ETL processes: PRC, Fact Resources, Agency Wide Activity, Agency Activity, NPM Activity, Rpio Activity, Approp, Subapprop, Fund.
  - Created tables, SQLs, Constraints for implementing the above ETL processes.

- Worked on passing of parameters in packages, derived columns expressions, null and default values, Resource (combining 2 separate columns ResourceDollars and ResourceFTE into a single column based on BOC Type).
  - Studied Compass Design documents.
- Data Capture
  - Continued work on Metadata and QA procedures.
  - Worked on RefFund and PRC related Metadata.
  - Completed all Metadata entry for the new RDE Grid templates.
  - Completed all Metadata entry for supporting grids needed to support the new RDE grid templates.
  - Built out first drafts of new database objects needed to support modeling processes.
  - Built out first draft of metadata for modeling objects.
- System development and support
  - Completed CRUD logic to prevent soft-deletion of data referenced by another, active record.
  - Continued to work on processes for more rapid QA and correction of Metadata.
  - Continued working on Version Security implementation.
  - Continued on creation of Metadata load processes and procedures.
  - Continued on creating templates based on a new RDE table structure
  - Further refined how information is shared between grids, using specific columns and relationships and additions to the Grid SQL Parameter structure, rather than a state-model approach.
  - Resolved issue with Relative Comparison columns.
  - Resolved some issues with Save As from RDE, work in progress.
  - Worked on the menu and screens for Modeling Modules – Raw Payroll Data, Base Cost, Scenario Maintenance and Details, Scenario Applied to Version, this work is in Progress. Demo was performed for the client. Latest requirements were captured.
  - Developed flow chart for Modeling processes.
  - Modified the code for Version Selector “OK” button so it works with bug fixed in new release of Dev Express.
  - Fixed issue with Filter Builder not working correctly with Version Management/Selection grids.
  - Created new tables BulkHeaderSetup and Bulk Header to allow for generic bulk data operations
  - Built out user defined table type for multi-row cached CRUD from the RDE Grids.
- Standards and Procedures
  - Continued work on the design, implementation and data flow of the Change Tracking process.
  - Designed how non-database columns are handled in grids.
  - Continued to work on the design, implementation and data flow of the Security aspects.

*Work Planned (February 1st - February 28th)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4 requirements.
- Continue testing and implementing relevant features that will aid in ETL processes later on in the project.
- Continue work on the design, implementation and data flow of the Change Tracking process.
- Continue to work on testing and implementation.
- Continue to work on the design, implementation and data flow of the Security aspects.
- Begin implementing all Metadata entry as patterns – change pattern design as needed.
- Data Capture
  - Build out Metadata objects needed to support report processes and complete all entries for the new RDE grid templates.
- System development and support
  - Finalize the Version Management module including Security assignments from this module.
  - Work on clearing values selected in dropdowns on RDE and RefData modules.
  - Work on Modeling screens functionality.
  - Work on 'PRC like' RefData creation.
  - Work on CRUD procedures needed for Modeling.
  - Implement change tracking, if possible.
  - Updates to SQLBuild procedure to handle new types of SQL components.
  - Fix all issues with Ref Data and Version Management grids.
  - Finish SQL Build for concatenated fields.
  - Build out a save of constructed, concatenated columns.
  - Finalize and implement signatures on all bulk operations.

## PROJECT DELIVERABLES

For the reporting period January 1<sup>st</sup> – January 31<sup>st</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Front-end files containing modifications to fix issue with NPM users unable to enter “9R” like AH data (basbuild_01052015_bassveb.zip)	1/5/2015
Updated BFS SLCM Artifact status log (BFS SLCM doc status 12162014.docx)	1/5/2015
Draft Exhibit 53 report output (2015-01-05 Exhibit 53.pdf)	1/5/2015
Front-end files containing modifications to Version Status screen (basbuild_01052015_basmain.zip)	1/5/2015
Exhibit 53 report data analysis (2014 items missing from exh53 xwalk.xls)	1/8/2015
2015 ACT 3.0 Quarterly Hill Report; Hill Technical Monthly Report Instructions on how to update static BAS reporting table (Quarterly Hill 1_12_2015.xlsx) (Hill Technical Monthly 1_12_2015.xlsx) (Hill Technical Monthly 1_12_2015 (with codes).xlsx) (Instructions on updating TMP reporting table.docx)	1/12/2015
December 2014 project status and cost reports (EPA-CFO_December_2014_Status.doc, EPA OCFO BAS cost report December 2014.xlsx)	1/13/2015
BFS User Manual Outline Draft (BFS User Manual Outline Draft.docx.)	1/13/2015
8 Year Tables (tll.8v.docx) (tll_esp_8v.docx) (tll_ord_8v.docx)	1/14/2015
Front-end files containing modifications, fixed issue with Allocated Other report (basbuild_01152015_baspayrl.zip)	1/15/2015
Front-end files containing modifications to payroll so SU users can see “Private” Base Costs and Scenarios (basbuild_01152015_basadhoc.zip)	1/15/2015

FY 15 Q1 (FY14 CO) Reprogramming Report (1_20_2015 Congr_Quarterly (with codes).xlsx) (1_20_2015 Congr_Quarterly.xlsx) (new carryover versions.jpg) (QTR Cong Carryover.zip)	1/20/2015
Budget Information by State Macro (State_highlights_output_2015.docx) (State_highlights_output_2014.docx) (State_data.docx) (State_highlights_output_2016.docx) (State-ProgProj.docx) (ProgProj-State.docx)	1/21/2015
Brownfields Budget Information by State Data 2015 (State_highlights_output_2014.docx) (State_highlights_output_2016.docx) (State_highlights_output_2015.docx)	1/21/2015
BAS CJ Documentation (CJ macro documentation.doc)	1/21/2015
FY 2014 Performance results (PPFS 8yr table rows) (cj_macro.docm)	1/21/2015
Budget Information by State Macro (State Highlights 2015_01_21.zip) (PP-State 2015-01-21.zip)	1/22/2015
Resource Factsheet Table (cj_macro.docm) (t10p_J9.docx)	1/26/2015
Updated Brownfields Budget Information by State Data 2015 (State_highlights_output_2014.docx) (State_highlights_output_2016.docx) (State_highlights_output_2015.docx)	1/28/2015
Brownfields Numbers latest Macro files for State Highlights (State Highlights 2015_01_28.zip)	1/28/2015
Hill Quarterly (Quarterly Hill 1_29_2015.xlsx)	1/29/2015



# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report February 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**March 12, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (February 1st - February 28th)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests.

#### *Work Planned (March 1st - March 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

*Work Performed (February 1st - February 28th)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, and update or create action items based on info that came out of the meetings.
- Disaster Recovery update meeting held with EPA.
- Continued gathering current information on all BAS-related servers and processes to update the system characterization document for FY 2015.
- Continued to review the BFS DR plan.

*Work Planned (March 1st - March 31st)*

- Respond to all EPA requests for security and disaster recovery support.
- Follow up on action items from Disaster Recovery meeting.
- Finalize the process for EPA Oracle backups.
- Continue adding info to the DR plan.
- Test F5 access to the DR site and EPA Test Oracle server..
- Set up process to use the One Drive for getting backups to KeyLogic.

**Subtask 1.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Need a decision from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

*Work Performed (February 1st - February 28th)*

- KeyLogic responded to EPA requests for BAS enhancements, including:
  - Fixed issue with Adhoc Historical reports with Activity group selection, tested and delivered.
  - Supported clients on running Adhoc reports with the combination of Resources and Reprogramming versions.
  - Added Save As ability to 8 year Standard Performance report.
  - Modified 8 year Standard Performance report for new driver version.
  - Fixed 8 year Standard Performance report issue pointed out by Dominic Nelson.
  - Created new 2015 NOA Congressional Reprogramming Report and incorporated it into BAS Standard Reports Module.
  - Worked with EPA to get Conference report spreadsheet into a format usable by our macro application.
  - Used macro to flatten conference data, loaded data from it for the Rpt Reprogramming ProgArea Conf report.

*Work Planned (March 1st - March 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

**Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (February 1st - February 28th)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (March 1st - March 31st)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

**Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (February 1st - February 28th)*

None

*Work Planned (March 1st - March 31st)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

**Subtask 1.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (February 1st - February 28th)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

*Work Planned (March 1st - March 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to Keylogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (February 1st - February 28th)*

None

*Work Planned (March 1st - March 31st)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

### *Work Performed (February 1st - February 28th)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Reviewed document regarding changes to BAS on the implementation of the requirements for Compass version 7.2. It was concluded that Reprogramming data upload will have to be modified.

### *Work Planned (March 1st - March 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Continue supporting BAS-Compass interface activities.
- Support on pushing data to Compass:
  - Implement changes in BAS files feeding Compass, as necessary info is made available.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

Need response on copying bids from one FY to another with the same strategic plan.

#### *Work Performed (February 1st - February 28th)*

- Continued providing ACS/PERS miscellaneous support:
  - Support in PERS security – locking /unlocking multiple versions for data entry.

#### *Work Planned (March 1st - March 31st)*

- Continue enhancing ACS/PERS functionality and assisting in ACS/PERS data analysis as requested.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation.
- Decision pending on adding the ability to copy Bids across FY within the same Strategic Plan.
- Continue analyzing and discussing ACS/PERS conversion from Strategic Plan 5.0 to Strategic Plan 6.0, as needed.

### **Subtask 2.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (February 1st - February 28th)*

None

#### *Work Planned (March 1st - March 31st)*

None

### **Subtask 2.7 Training**

No activity during the reporting period.

## **Subtask 2.8 Documentation**

### *Client Actions/Decisions Required*

None

### *Work Performed (February 1st - February 28th)*

- Continued modifications to the ACS/PERS modules users guides, as necessary.

### *Work Planned (March 1st - March 31st)*

- Continue efforts to develop and revise system documentation as time and priorities permit.

## **Task 3: Financial and Other Reporting Requirement Support**

### *Client Actions/Decisions Required*

None

### *Work Performed (February 1st - February 28th)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Statement of Net Cost, Hill Monthly, and Exhibit 53 reports.
- Continued working on maintenance and infrastructure tasks such as Olapdev space and BAS SQL Server issues, partitioning and cleanup.
- Made changes to Unpaid Obligs SQL and Payroll adjustment factor in the nightly import package.
- Loaded the data for Oct, Nov, Dec, Jan month-end loads into BAS with the new changes.
- Continued support for maintenance such as changing passwords on different servers, restarting them, installing updates.
- Continued supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports as requested.
- Continued support for reporting for Targeted, Applied and Retired Employees.
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on BAS SQL Server and BAS Oracle server.



Work performed by FedSight Contractors for the period **October – December 2014:**

- Provided 10 simultaneous user subscriptions to FEDSIGHT reports and analytical models accounts include: OARS IO, OARS EMD, OARS TMD, OARS BED, and OARS HMD.
- Provided Ad hoc support for multiple ad hoc analysis requests related to travel, FTE utilization, status of funds, and other areas.
- Extracted data from CDW and OMIS and updated complete data sets and conducted quality assurance reviews and testing.
- Supported multiple briefings with EPA ORD OARS leadership related to FEDSIGHT configuration, tool enhancement, and change management.
- Researched potential data sources for submitted/unpaid invoices based on conversations with OCFO and reviews of CDW data sources.
- Initiated discussions with EPA and prime contractor in re potential approaches to directly connect to EPA/ORD data sources.
- Traveled to EPA ORD Research Triangle Park (RTP) to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Traveled to EPA ORD Washington, D.C. location to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Researched potential deployment alternatives based on ORD requests and conducted review meetings with OARS and OSIM to review alternatives.
- Configured FEDSIGHT on EPA ORD servers and refreshed system with latest EPA ORD dataset from CDW and OMIS.
- Reestablished user accounts based on EPA ORD project sponsor guidance to include an account for each OARS operating division as well as individual accounts for OARS leadership.
- Participated in multiple review meetings with ORD OARS project sponsor and OSIM leadership to discuss path forward and required information.
- Provided support for system architecture and system security requests for information from OARS project sponsor and OSIM coordinator.
- Provided support for IT Investment review process including requirements documentation, system lifecycle information, and associated documents.
- Deliverables: Access to FEDSIGHT via subscriptions and Briefing Materials

*Work Planned (March 1st - March 31st)*

- Continue to support budget/finance related reports, as requested by client.
- Continue supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports.
- Continue processing data from spreadsheets as needed.

**Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (February 1st - February 28th)*

None

*Work Planned (March 1st - March 31st)*

- Support OCFO staff as requested.

## **Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (February 1st - February 28th)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - General (Multiple Contact Points)
    - More discussion about what will happen with Lotus Notes server once OA is gone.
  - 2015 OCFO Recertification DB (Pat Wingfield)
    - Few issues with Recertification database to look into
    - One was with sending mail from the workflow. Some newer agency users were identified as not having Lotus Notes email send abilities.
    - Problem with reprogramming tab not showing up correctly. Worked with Pat and Adina to correct issue.
  - Budget Submissions/CJ DB (Jackye Herzfeld)
    - Some issues with people not having access to data after the budget submission process was complete. Problem was that document was in "Final" status and therefore locked.
  - Training Enrollment Database (Richard Blackman)
    - Richard requested some changes that will automatically put a user on the wait list (if they choose to be) after registering and finding out that there are currently no seats left. This use to be a manual process, now it will happen automatically.

*Work Planned (March 1st - March 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Assist with completion of Lotus Notes to SharePoint conversion questionnaires when needed.
  - OCFO Recertification DB – Updates to the new workflow process if needed.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (February 1st - February 28th)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (March 1st - March 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (February 1st - February 28th)*

- Continued providing routine project management oversight, including developing monthly technical and cost reports.
- SAN storage failing/extremely slow, which was affecting Oracle backups. The problem cascaded into production hours. Spent great deal of time troubleshooting the problem and also analyzing the entire SAN setup. Majority of troubleshooting was conducted onsite from 11:00 PM until 4:00 AM over several nights and a Saturday. It was determined that the SAN connections were not properly set up. Access to the SAN from the Oracle VM was actually going over the LAN routers instead of connecting directly to the SAN server. It is likely that installation of SEP (Symantec AV) and general tightening of security across the servers and networks contributed to the problem. A direct connection to a NAS was set up as a stop gap measure until the SAN connection is resolved. A solution was identified to connect the Oracle VM directly to the SAN and will be implemented soon.
- Identified that the way the WD Cloud backup device (NAS) was being used was

flawed:

- Large amounts of data were being passed over the network from servers to the device which affects overall network performance for end users.
  - Data was being passed over network cards on the server that was also utilized for operational transactional connections. This can negatively impact end users.
  - The NAS device was sitting unsecured in a work area/cubical.
  - All NAS shares were public shares, meaning any user could browse the network and access any folder on the device.
  - Corrective action: Took NAS off the network and created a private network only accessible by our servers through direct connections to the device. NAS is only accessible from the servers and all access is controlled on the server.
- Installed Sysinternals BSInfo desktop backgrounds on the servers. This makes each server quickly identifiable for the remote in system administration and should reduce the possibility of making changes or updates to the wrong server.
- Gained access to BigFix TEM administration console. Started learning the ins and outs of the monitoring agents, patch pushes, and general manageability.
- Citrix license processed. Identified that license file on our server has not been updated since 2011. Will work with Fred M to get Citrix customer portal access and download license file to update our server.
- Disabled SSL 3.0 and enabled TLS 1.0 on our Citrix server. This was a pressing and critical security vulnerability that we were required to resolve. Will work with Eric K to get a re-scan of the server to ensure fix was successful. Citrix users are successfully connecting after the update.
- Applied critical security patches to servers.
- Now have access to Symantec Antivirus Management console so we can manage scan times, restart behavior and exception lists for our servers.
- Request for BigFix custom reports access still in progress.
- KeyLogic on-site Sys Admin received AAA/F5 token and can now access network and servers remotely to provide support and maintenance.
- Continued monitoring of backups and general server health.

#### *Work Planned (March 1st - March 31st)*

- Install BigFix agents on COOP machines. Begin pushing updates through BigFix.
- Create standard OCFO image for the new COOP machines, customized for OCFO users' requirements.
- Automate and test the BAS dump process to OneDrive. This was stalled because of the OneDrive account expiration.
- Implement Symantec Backup Exec for all server backups.
- Spec out requirements for upgrading current 2003 servers. Submit to Jackye for approve and purchase.
- Obtain BigFix custom reports access.
- Work on Lotus Notes server hosting and application platform migration.

- Continue providing routine project management oversight, including developing monthly technical and cost reports.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Finalize ACS code structure and column dependencies.
- Comment on or approve requirements traceability, Quality Management, Configuration Management and Test Management plans.

### *Work Performed (February 1st - February 28th)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of EPA's and other available Cloud service offerings.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4.
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Responded to EPA in reference to SLCM documents.
  - Supported requirements testing activities.
- Design and Review meetings
  - Continued participating in numerous meetings for different modules such as Modeling, Bulk Data Operations, new ACS code structure for RDE and reports.
  - Participated in discussions on Program Area Congressional reports, ACS changes, PRC changes, Org xwalk changes, Auto-Generation of Ref data during Payroll Modeling process, Rpio-AH-local relationships and data.
  - Continued to work on the design, implementation and data flow of Security.
  - Internal discussions on documentation process, Rpio Defined 1, Rpio Defined 2, ACS display.
  - Continued on design of structure to allow the building of data models for the metadata driven report process.
  - Continue work on the design, implementation and data flow of the Security aspects.
  - Worked on the following ETL processes: PRC, Fact Resources, Agency Wide Activity, Agency Activity, NPM Activity, Rpio Activity, Approp, Subapprop, Fund.
  - Created tables, SQLs, Constraints for implementing the above ETL processes.
- Data Capture

- Continued building out first drafts of new database objects needed to support modeling processes.
- System development and support
  - Continued to work on processes for more rapid QA and correction of Metadata.
  - Continued working on Version Security implementation.
  - Continued on creation of Metadata load processes and procedures.
  - Continued on creating templates based on a new RDE table structure
  - Further refined how information is shared between grids, using specific columns and relationships and additions to the Grid SQL Parameter structure, rather than a state-model approach.
  - Continued work on the menu and screens for Modeling Modules – Base Cost/Rollups/scenario/Labels and Factors.
  - Worked out a design for the screen to apply adjustments to the scenario and finally apply the scenario to source version.
  - Built out logic for bulk version merging.
  - Built out structure to support bulk data operation.
- Standards and Procedures
  - Continued work on the design, implementation and data flow of the Change Tracking process.
  - Designed how non-database columns are handled in grids.
  - Continued to work on the design, implementation and data flow of the Security aspects.

*Work Planned (March 1st - March 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4 requirements.
- Continue testing and implementing relevant features that will aid in ETL processes later on in the project.
- Continue work on the design, implementation and data flow of the Change Tracking process.
- Continue to work with architect on testing and implementation.
- Continue to work on the design, implementation and data flow of the Security aspects.
- Begin implementing all Metadata entry as patterns – change pattern design as needed.
- Data Capture
  - Build out Metadata objects needed to support report processes and complete all entries for the new RDE grid templates.
  - Continue to refine all metadata used for the new RDE Grid templates
  - Complete all metadata loading procedures by column usage
- System development and support
  - Work on Modeling screens functionality.

- Work on 'PRC like' RefData creation.
- Work on CRUD procedures needed for Modeling.
- Implement change tracking, if possible.
- Updates to SQLBuild procedure to handle new types of SQL components.
- Finalize the Version Management module to including Security assignments from this module.
- Finish SQL Build for concatenated fields.
- Build out a save of constructed, concatenated columns.
- Work to finalize and implement signatures on all bulk operations.

## PROJECT DELIVERABLES

For the reporting period February 1<sup>st</sup> – February 28<sup>th</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Front-end files containing modifications to historic Adhoc reports (basbuild_02042015_basadhoc.zip)	2/4/2015
Front-end files containing modifications to 8 year Standard report, addition of Save capability (basbuild_02042015_basrpts.zip)	2/4/2015
Recent Macros (hill_technical 2015-02-03.zip) (Qtr Congr CO 2015-01-20.zip) (Qtr Hill Report (Excel) 2015-01-28.zip)	2/6/2015
Front-end files containing modifications to 8 year Standard report (basbuild_02092015_basrpts.zip)	2/9/2015
January 2015 project status and cost reports (EPA-CFO_January_2015_Status.doc, EPA OCFO BAS cost report January 2015.xlsx)	2/10/2015
Front-end files containing modifications to 8 year Standard report (basbuild_02192015_basrpts.zip)	2/19/2015
Hill Technical Monthly Reports (Hill Technical Monthly 2_19_2015.xlsx) (Hill Technical Monthly 2_19_2015 (with codes).xlsx)	2/19/2015
Front-end files containing modifications to include a new 2015 NOA Congressional report (basbuild_02042015_basrpts.zip)	2/25/2015



# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report March 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**April 10, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (March 1st - March 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests.

#### *Work Planned (April 1st - April 30th)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

*Work Performed (March 1st - March 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, and update or create action items based on info that came out of the meetings.
- Disaster Recovery update meeting held with EPA.
- Continued gathering current information on all BAS-related servers and processes to update the system characterization document for FY 2015.
- Continued to review the BFS DR plan.

*Work Planned (April 1st - April 30th)*

- Respond to all EPA requests for security and disaster recovery support.
- Follow up on action items from Disaster Recovery meeting.
- Finalize the process for EPA Oracle backups.
- Continue adding info to the DR plan.
- Test F5 access to the DR site and EPA Test Oracle server..
- Finalize process to use the One Drive for getting backups to KeyLogic.

**Subtask 1.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Need a decision from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

*Work Performed (March 1st - March 31st)*

- KeyLogic responded to EPA requests for BAS enhancements, including:
  - Customer support on getting the information on how the Reserves are handled in Budget loads.
  - Created a spreadsheet with Versions in Strategic Plan 6.0 that have resource records with RCenters with State assignments, per customer’s request.
  - Created spreadsheets for all Strategic Plans Program Project data with no Program Flag (‘ENV’ or ‘ESP’) provided – per customer’s request.
  - Updated packages on the EPA test oracle server to point to the new FeedMom/Compass area to be used for testing the Compass restricting of the Budget Load and Reprogramming transfer process from BAS.

*Work Planned (April 1st - April 30th)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

**Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (April 1st - April 30th)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

**Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

None

*Work Planned (April 1st - April 30th)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

**Subtask 1.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

*Work Planned (April 1st - April 30th)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to Keylogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

None

*Work Planned (April 1st - April 30th)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

*Work Performed (March 1st - March 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Attended meeting concerning changes to BAS on the implementation of the requirements for Compass version 7.2.

*Work Planned (April 1st - April 30th)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Continue supporting BAS-Compass interface activities.
- Support on pushing data to Compass:
  - Implement changes in BAS reprogramming files feeding Compass.

**Task 2: Performance Module System Design, Development and Maintenance**

**Subtask 2.1 System Specification Review**

No activity during the reporting period.

**Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

**Subtask 2.3 System Development**

No activity during the reporting period.

**Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

**Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

Need response on copying bids from one FY to another with the same strategic plan.

*Work Performed (March 1st - March 31st)*

- Continued providing ACS/PERS miscellaneous support.

*Work Planned (April 1st - April 30th)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis as requested.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.
- Continue analyzing and discussing ACS/PERS conversion from Strategic Plan 5.0 to Strategic Plan 6.0, as needed.

**Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

None

*Work Planned (April 1st - April 30th)*

None

**Subtask 2.7 Training**

No activity during the reporting period.

**Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

- Continued modifications to the ACS/PERS modules users guides, as necessary.

*Work Planned (April 1st - April 30th)*

- Continue efforts to develop and revise system documentation as time and priorities permit.

**Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Statement of Net Cost, Hill Monthly (into 2015 ACT 4.0) and Exhibit 53 reports.
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on BAS SQL Server and BAS Oracle server.
- Continued support for maintenance such as changing passwords on different servers, restarting them, installing updates.
- Continued supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports as requested.
- Continued support for reporting for Targeted, Applied and Retired Employees.

*Work Planned (April 1st - April 30th)*

- Continue to support budget/finance related reports, as requested by client.
- Continue supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports.
- Continue processing data from spreadsheets as needed.

**Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

None



*Work Planned (April 1st - April 30th)*

- Support OCFO staff as requested.

## **Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (March 1st - March 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - General (Multiple Contact Points)
    - Talked with OA group about moving database server to RTP.
    - Answered support questions about using Lotus Notes and accessing databases.
  - 2015 OCFO Recertification DB (Pat Wingfield)
    - Answered questions about some people getting error messages when the application attempted to send mail. Upon investigation, newer agency employees are being setup without a LN email server. This causes the mail to fail.
  - Questions for the Record (Talitha Lindo)
    - Answered questions about a few users not being able to access QFR docs.

*Work Planned (April 1st - April 30th)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Budget Submission – Integrate new EOC spreadsheets into detach/merge process.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

*Work Planned (April 1st - April 30th)*

- Install BAS front and back end as necessary to implement system revisions.

**Task 7: Project Management/Technical Assistance**

*Client Actions/Decisions Required*

None

*Work Performed (March 1st - March 31st)*

- Continued providing routine project management oversight, including developing monthly technical and cost reports.
- Provided hardware and software information required for audits per Eric Kim's request.
- End user support and software updates pushed via BigFix management agents.
- Began configuration of COOP machines with BigFix to identify what works and what doesn't work. Attempted to create standard list of software and configurations for new COOP laptops.
- Ongoing management and maintenance of all physical servers and server VMs.
- Began crafting plan for server upgrades from Windows 2003 to Windows 2008 or 2012 by July 14<sup>th</sup>, 2015.
- Backup verification and space management.
- Turned off VM replication as it continued to be problematic. Copy of servers still exist in Las Vegas datacenter and can be used for purpose of disaster recovery.
- Configured BigFix agents to push updates to remote workers.
- Assisted with processing OneDrive purchase. Began work on OneDrive configuration for use as BAS backup repository. Identified issue with the OneDrive client program which will require a custom solution in order to automate the backup process. The issue is related to Office file caching on the local C: drive. It is very disappointing that the OneDrive client program is not able to meet our needs. The OneDrive cloud storage space does meet our needs.

*Work Planned (April 1st - April 30th)*

- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Create custom PowerShell script that will provide secure, direct access to the OneDrive storage. Customize this to automatically copy BAS backups to OneDrive.
- Submit purchase request to Eric Kim for server/SAN related hardware which will support the needs of OCFO-OB for the next 2 years.

- Configure Las Vegas Oracle server as a hot stand by independent of Hyper-V replication. Submit DR test plan to Eric K and Jackye H for approval. Schedule test that can be done without taking down the production server.
- Investigate viability of using Symantec Backup Exec 2014 Backup Software for the OCFO-OB servers.
- Create plan for possibly migrating file server to Potomac Yards or RTP hosted VM. RTP would also take care of backups which will reduce possibility of data loss.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Finalize ACS code structure and PRC column dependencies.
- Comment on or approve requirements traceability, Quality Management, Configuration Management and Test Management plans.

### *Work Performed (March 1st - March 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of Microsoft Azure Cloud service offering.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Responded to EPA questions on EPA's Investment Review Template.
  - Reviewed Security Requirements definition document.
  - Prepared, for internal use, user acceptance testing documents.
- Design and Review meetings:
  - Continued participating in numerous meetings for different modules such as Modeling, Bulk Data Operations, and new ACS code structure for RDE and reports.
  - Participated in discussions on ACS changes, PRC xwalk changes, Org xwalk changes, Rpio-AH-RC-local-SubRC relationships, questions were documented and responses sent to client.
  - Internal discussions on integration process, RefData, Rpio Defined 1, Rpio Defined 2, ACS display and data issues.
  - Continued on design of structure to allow the building of data models for the metadata driven report process.
  - Continue work on the design, implementation and data flow of the Modeling aspects.

- Worked on the following ETL processes: PRC, Fact Resources, RpioDefined1, RpioDefined2, Rpio Activity, NPM Activity, Org, Agency Wide Activity.
- Populated all the 6 versions for FactBudgetResources data and sent the data in spreadsheet format to the client for review: 2014 ENA 1.0, 2014 OMB 1.0, 2015 ENA 1.0, 2015 OMB 1.0, 2016 PRS 1.0, 2016 OMB 1.0.
- Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same.
- Researched and documented options for migration of SQL Server 2000 to higher versions and DTS to SSIS conversion.
- Data Capture:
  - Had several rounds of data and metadata cleanup to remove obsolete metadata where new database tables replaced some existing tables that needed to be deleted.
  - Continued building database objects needed to support modeling processes.
  - Data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
- System development and support:
  - Continued to work on processes for more rapid QA and correction of metadata
  - Continued with creation of metadata load processes and procedures
  - Further refined how information is shared between grids, using specific columns and relationships and additions to the GridSQLParameter structure, rather than a state-model approach.
  - Continued working on the screens for Modeling Modules – got the display, updates and inserts of Scenario/Label Adjustments working as well as display, updates and inserts of Base cost/Scenario.
  - Worked out a design for the Base cost rollups screen.
  - Worked out the issues with ‘Money’ type parameters on Base Cost Adjustment screen.
  - Worked on Base Cost Adjustment Edits.
  - Worked out Cancel buttons functionality on the Modeling opener and child windows.
  - Worked on Modeling SourceVersionSelector and Modeling TargetVersionSelector implementation.
  - Worked on debugging Version Management/Selection.
  - Worked on debugging RefData Module, issues documented and reported.
  - Created Stored Procedures for bulk version copy and merge.
  - Support for bulk data operations.
  - Participated in testing and debugging of the Azure State Session Provider usage in BFS.

#### *Work Planned (April 1st - April 30th)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4

- requirements.
- Continue to work on system testing and implementation.
  - Continue work on the design, implementation and data flow of the Reporting module.
  - Continue to work on the design, implementation and data flow of the Modeling Module aspects.
  - Continue work on the design, implementation and data flow of the Change Tracking process.
  - Finalize implementing all Metadata entry as patterns – change pattern design as needed.
  - Data Capture:
    - Finalize metadata used for the new RDE Grid templates.
    - Finalize metadata loading procedures by column usage.
    - Finish building out metadata objects needed to support report processes.
    - Complete metadata entry for Modeling module.
  - System development and support:
    - Continue work on Modeling screens functionality.
    - Continue work on 'PRC', 'ORG' and RefData creation.
    - Continue work on CRUD procedures and other database related aspects of the Modeling module.
    - Implement change tracking, if possible.
    - Finalize SQLBuild procedure to handle new types of SQL components.
    - Finalize the RefData module functionality.
    - Finalize SQL Build for concatenated fields as well as saving of constructed columns.
    - Finalize and implement signatures on all bulk operations.

## PROJECT DELIVERABLES

For the reporting period March 1<sup>st</sup> – March 31<sup>st</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Hill Technical Monthly Reports (Hill Technical Monthly 3_9_2015.xlsx) (Hill Technical Monthly 3_9_2015 (with codes).xlsx)	3/9/2015
February 2015 project status and cost reports (EPA-CFO_February_2015_Status.doc, EPA OCFO BAS cost report February 2015.xlsx)	3/12/2015
Updated BFS Requirements Traceability Matrix (EPA BFS RTM 2.xlsx)	3/18/2015
Minutes from client BFS meeting (BFS Meeting Minutes 3_16_2015)	3/18/2015
Notes from client meeting regarding BFS interface look/touch/feel (EPA LTF 3.pptx)	3/18/2015
Updated BFS Requirements Traceability Matrix (Release 1.0 requirements only) (EPA BFS RTM 3.xlsx)	3/25/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report April 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**May 12, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (April 1st - April 30th)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see SubTask 1.5).

#### *Work Planned (May 1st - May 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.



#### *Work Performed (April 1st - April 30th)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, and update or create action items based on info that came out of the meetings.
- Disaster Recovery update meeting held with EPA.
- Continued gathering current information on all BAS-related servers and processes to update the system characterization document for FY 2015.
- Continued to review the BFS DR plan.

#### *Work Planned (May 1st - May 31st)*

- Respond to all EPA requests for security and disaster recovery support.
- Follow up on action items from Disaster Recovery meeting.
- Continue to finalize the process for EPA Oracle backups.
- Schedule a Disaster Recovery exercise.
- Continue to look into why F5 is still not working for the Oracle Test server.
- Work to finalize process to use the One Drive for getting backups to KeyLogic.

### **Subtask 1.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Need a decision from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

#### *Work Performed (April 1st - April 30th)*

- KeyLogic responded to EPA requests for BAS enhancements, including:
  - Customer support on the information about the Reprogramming using one account for all of the “to” lines.
  - User support in reactivating users rights to ACS module.
  - Assisted in identifying the right Key Program views to be used in converting the data from BAS to BFS.
  - Assisted users in understanding of cross walking process of the resources from SP 5.0 to SP 6.0.

#### *Work Planned (May 1st - May 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

### **Subtask 1.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (April 1st - April 30th)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

#### *Work Planned (May 1st - May 31st)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

### **Subtask 1.7 Training**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (April 1st - April 30th)*

None

#### *Work Planned (May 1st - May 31st)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

### **Subtask 1.8 Documentation**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (April 1st - April 30th)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.

- Continued maintaining BAS change control log.

*Work Planned (May 1st - May 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to Keylogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (April 1st - April 30th)*

None

*Work Planned (May 1st - May 31st)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

*Work Performed (April 1st - April 30th)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.

- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Attended meeting concerning changes to BAS on the implementation of the requirements for Compass version 7.2.
- Testing of FEEDMOM uploads of Org Codes to Compass, Earmarks to Compass and Reprogramming to Compass: changed production package to point to FEEDMOM test module until FEEDMOM developers shook out problems in their code.

*Work Planned (May 1st - May 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.
- Support on pushing data to Compass:
  - Testing on the implemented changes in BAS Reprogramming files feeding Compass.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

## **Subtask 2.5 Enhancing System Functionality**

### *Client Actions/Decisions Required*

Need response on copying bids from one FY to another with the same strategic plan.

### *Work Performed (April 1st - April 30th)*

- None

### *Work Planned (May 1st - May 31st)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.
- Continue analyzing and discussing ACS/PERS conversion from Strategic Plan 5.0 to Strategic Plan 6.0, as needed.

## **Subtask 2.6 Acceptance Testing**

### *Client Actions/Decisions Required*

None

### *Work Performed (April 1st - April 30th)*

None

### *Work Planned (May 1st - May 31st)*

None

## **Subtask 2.7 Training**

No activity during the reporting period.

## **Subtask 2.8 Documentation**

### *Client Actions/Decisions Required*

None

*Work Performed (April 1st - April 30th)*

- None

*Work Planned (May 1st - May 31st)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (April 1st - April 30th)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly (into 2015 ACT 6.0) and SNC report for FY 2015 at end of Quarter 2.
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on BAS SQL Server and BAS Oracle server.
- Worked on data issue in nightly actual import related to missing program project.

*Work Planned (May 1st - May 31st)*

- Continue to support budget/finance related reports, as requested by client.
- Continue supporting OCFO and their other contractors in their efforts to extract data from the ACS/PERS modules in BAS for the purpose of supporting the OCFO reporting dashboard and other reports.
- Continue processing data from spreadsheets as needed.

### **Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (April 1st - April 30th)*

None

*Work Planned (May 1st - May 31st)*

- Support OCFO staff as requested.

**Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (April 1st - April 30th)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Answered some questions about the OA server and moving it to RTP.
    - Answered some general support questions about Lotus notes.
  - Budget Submission DB (Jackye Herzfeld)
    - Jackye having discussions with KeyLogic about EOC document inclusion in Budget Submission process.
  - CATD Database (Lorna Washington)
    - Helped Lorna with an issue where she had input the incorrect completion date.
  - Open Commitments DB (Joe Layman)
    - Helped Joe with getting Open Commitments loading into the database.
  - Data Call and Response RPROS (Aaron Staniszewski)
    - Assisted with a few people who could not access the database.
    - Later in the month, seems we lost the domain name and no one could access the server without using the IP address.
  - 2015 OCFO Recertification DB (Pat Wingfield)
    - Was asked by Joe Layman about removing the check for requests over \$1M to be split into 75/25 requests. This had been in place for a while so verified the request through Pat Wingfield. She agreed, the code was commented out, and the fix pushed to production.

*Work Planned (May 1st - May 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Budget Submission – Integrate new EOC spreadsheets into detach/merge process.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (April 1st - April 30th)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (May 1st - May 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (April 1st - April 30th)*

- Continued providing routine project management oversight, including developing monthly technical and cost reports.
- End user support and software updates pushed via Big Fix management agents.
- Troubleshoot problems with Janet R's COOP machine. Problems with Notes resolved and functioning properly.
- Ongoing management and maintenance of all physical servers and server VMs.
- Set up OneDrive on test server. Unable to use sync app on server due to caching behavior and profile specific requirement on the part of Microsoft. OneDrive is configured for use via web browser and manually upload.
- Assisted with requesting credit for taxes on OneDrive purchase. Credit was applied.
- Performed backup verification and space management.
- Tested alternate configuration for Oracle Test VM which moves system log to different volume. This will reduce the amount of data transmitted if replication turned back on.
- Troubleshoot slower performing Oracle server as compared to Oracle Test server.
- Searched for outlet for recycling (and wiping) 175 external hard drives pulled from surplus computers and servers. Some of the hard drives have been sitting in the office for 14 years. Identified Unicor as service we can use, however need full pallet of items for pickup.
- Identified numerous old laptops and desktop machines for surplus.
- Sent request for getting rid of the Konica Minolta multi-function color printer (in



- manufacturer box) sitting in OB area.
- The number of computer problems has been reduced significantly.

*Work Planned (May 1st - May 31st)*

- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Deliver file server migration plan to Jackye H for moving to hosted VM at Potomac Yard. This free server will also provide backup service and will be on new OS.
- Configure Las Vegas server as a hot stand by independent of Hyper-V replication. Submit DR test plan to Eric K and Jackye H for approval. Schedule test that can be done without taking down the production server.
- Identify BAS user computers who have local BAS installs. Provide info to EZTech to facilitate the hardware refresh for those users.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

*Client Actions/Decisions Required*

None

*Work Performed (April 1st - April 30th)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of Microsoft Azure Cloud service offering.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared BFS Use descriptions for system design documents.
  - Reviewed User Acceptance Test material with EPA.
  - Performed BFS integration tests.
- Design and Review meetings:
  - Continued participating in numerous meetings for different modules such as Modeling, SQL Builder, Bulk Data Operations, and new ACS code structure for RDE and reports.
  - Participated in discussions on ACS changes, PRC xwalk changes, Org xwalk changes, Rpio-AH-RC-local-SubRC relationships, questions were documented.
  - Internal discussions on Key Program, PRC xwalk changes, data migration between various databases.

- Continued work with Query Builder developer on providing Report Model metadata to the external query building tool (“Easy Query”).
- Worked on architecture of the multi-row save function in the RDE.
- Finalized drop 1 requirements for PRC, Org, and FUND sections of the RDE.
- Finalized drop 1 requirements for data entry of RefPRC and RefOrg data.
- Continue work on the design, implementation and data flow of the Modeling aspects.
- Worked on the following ETL processes: PRC (from xls and BAS) Fact Resources, Titles for xls, Key Program, Fact Key Program Resources.
- Populated the PRC table with data based on new requirements.
- Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same – Changed code, long title, short title from null to non-null for all Ref tables, Changed code, long title, short title from null to empty strings for all 999999 records; Created spreadsheet for missing data (missing titles and program area info for PRC’s, missing Rpio Activity).
- Created scripts for moving of data between databases.
- Data Capture:
  - Continued building database objects needed to support reporting and Bulk Data operations.
  - Continued building database objects needed to support modeling processes.
  - Data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
- System development and support:
  - Continued to work on processes for more rapid QA and correction of metadata.
  - Continued with creation of metadata load processes and procedures.
  - Worked on the issues found while testing RefData module – multiple metadata fixes and front end fixes.
  - Participated in testing and debugging of the Azure State Session Provider usage in BFS.
  - Worked on ORG and PRC screen in RefData Module with the filtering of the dropdowns for related columns for the existing records and new records.
  - Worked on Relative comparison function on multiple screens.
  - Switched to using standard Delete and Validation processes on RefData and Version Management screens.
  - Solved issues with “IsDeleted” not being defaulted and causing the problem of some newly created RefData records and Budget Version records not to show back on the screens.
  - Troubleshooting the issue with Entitlements on Budget Version not being cleared when the version was soft deleted.
  - Developed SQL stored procedures to implement multi-row data commits from the application.

*Work Planned (May 1st - May 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.

- Continue to support BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4 requirements.
- Continue to work on system testing and implementation.
- Finalize work on the design, implementation and data flow of the Reporting module.
- Continue to work on the design, implementation and data flow of the Modeling Module aspects.
- Continue work on the design, implementation and data flow of the Change Tracking process.
- Finish working on the RDE module.
- Finalize implementing all metadata entry as patterns; change pattern design as needed.
- Data Capture:
  - Finalize metadata used for the new RDE Grid templates.
  - Finish building out metadata objects needed to support report processes.
  - Complete metadata entry for Modeling module.
- System development and support:
  - Complete testing on multi-row commits.
  - Complete integration with Query Building module.
  - Complete stored procedures to support RDE import and export functions.
  - Continue working on Modeling screens functionality.
  - Finalize Fund/Approp/Subapprop RefData creation.
  - Continue working on CRUD procedures and other database related aspects of the Modeling module.

## PROJECT DELIVERABLES

For the reporting period April 1<sup>st</sup> – April 30<sup>th</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Change request for modifying BFS deployment schedule (BFS CR Schedule Change.pdf)	4/2/2015
Latest BFS Requirements Traceability Matrix (EPA BFS RTM 4.xlsx)	4/2/2015
Congressional Quarterly NOA reports (4_6_2015 Congr_Quarterly NOA (with codes).xlsx) (4_6_2015 Congr_Quarterly NOA.xlsx)	4/6/2015
March 2015 project status and cost reports (EPA-CFO_March_2015_Status.doc, EPA OCFO BAS cost report March 2015.xlsx)	4/10/2015
Hill Technical Macro - UPDATE (Hill Technical Monthly Macro.xlsm)	4/10/2015
List of BFS features to be implemented after initial release (Backlogged Items.xlsx)	4/10/2015
March Quarterly Hill Report (Quarterly Hill 4_14_2015.xlsx)	4/14/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report May 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**June 12, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (May 1st - May 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see SubTask 1.5).

#### *Work Planned (June 1st - June 30th)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

#### *Work Performed (May 1st - May 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, and update or create action items based on info that came out of the meetings.
- Disaster Recovery update meeting held with EPA.
- Discussed the access to Oracle Test server and submitted paperwork.
- Tested the One drive download of the backup files to KeyLogic, the file combine of downloaded files with 7-Zip software, and the combined file with import into the BASAPP\_DEV and BASAPP accounts at KeyLogic.

#### *Work Planned (June 1st - June 30th)*

- Schedule a Disaster Recovery exercise.
- Continue to finalize the process for EPA Oracle backups.
- Document the process to use the One Drive for getting backups to KeyLogic.

### **Subtask 1.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

#### *Work Performed (May 1st - May 31st)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Headers created for FDW Download per client’s request.
- Client support in data uploads from BAS into Compass.
- Provided information to client on some attributes of BOC to BAS.
- Support for Dominic Nelson unlocking SQL account in Oracle BAS.

#### *Work Planned (June 1st - June 30th)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

### **Subtask 1.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (May 1st - May 31st)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

#### *Work Planned (June 1st - June 30th)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

### **Subtask 1.7 Training**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (May 1st - May 31st)*

None

#### *Work Planned (June 1st - June 30th)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

### **Subtask 1.8 Documentation**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (May 1st - May 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.



*Work Planned (June 1st - June 30th)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (May 1st - May 31st)*

None

*Work Planned (June 1st - June 30th)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

*Work Performed (May 1st - May 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).

- Finalized support on FEEDMOM shakeout against the new Compass structures. After testing was complete, KeyLogic pointed all BAS packages using FEEDMOM back to the production instance of FEEDMOM

*Work Planned (June 1st - June 30th)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need response on copying bids from one FY to another with the same strategic plan.

*Work Performed (May 1st - May 31st)*

- None

*Work Planned (June 1st - June 30th)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.
- Continue analyzing and discussing ACS/PERS conversion from Strategic Plan 5.0 to Strategic Plan 6.0, as needed.

**Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (May 1st - May 31st)*

None

*Work Planned (June 1st - June 30th)*

None

**Subtask 2.7 Training**

No activity during the reporting period.

**Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (May 1st - May 31st)*

- None

*Work Planned (June 1st - June 30th)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (May 1st - May 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 7.0).
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on BAS SQL Server, F5 and BAS Oracle server.
- Worked on changing Obligs SQL and unpaid logic.

Work performed by FedSight subcontractor for the period Jan 1 – Feb 11, 2015 and billed in May 2015:

- Provided 75 simultaneous user subscriptions to FEDSIGHT reports and analytical models accounts include: OARS IO, OARS EMD, OARS TMD, OARS BED, and OARS HMD.
- Provided Ad hoc support for multiple ad hoc analysis requests related to budget, contracts, travel, FTE utilization, status of funds, and other areas.
- Extracted data from CDW and OMIS and updated complete data sets and conducted quality assurance reviews and testing.
- Supported multiple briefings with EPA ORD OARS leadership related to FEDSIGHT configuration, tool enhancement, and change management.
- Researched potential data sources for submitted/unpaid invoices based on conversations with OCFO and reviews of CDW data sources.
- Initiated discussions with EPA and prime contractor in re potential approaches to directly connect to EPA/ORD data sources.
- Traveled to EPA ORD Research Triangle Park (RTP) to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Traveled to EPA ORD Washington, D.C. location to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Configured FEDSIGHT on EPA ORD servers and refreshed system with latest EPA ORD dataset from CDW and OMIS.
- Participated in multiple review meetings with ORD OARS project sponsor and OSIM leadership to discuss path forward and required information.
- Provided support for system architecture and system security requests for information from OARS project sponsor and OSIM coordinator.
- Provided support for IT Investment review process including requirements documentation, system lifecycle information, and associated documents.
- **Deliverables: Access to FEDSIGHT via subscriptions and Briefing Materials**

*Work Planned (June 1st - June 30th)*

- Continue to support budget/finance related reports, as requested by client.

**Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (May 1st - May 31st)*

None

*Work Planned (June 1st - June 30th)*

- Support OCFO staff as requested.

**Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (May 1st - May 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Answered some general support questions about Lotus notes related to accessing databases now that server is at RTP.
  - 2015 OCFO Recertification DB (Pat Wingfield)
    - Worked with Joe Layman to get “DO” documents showing in the main Recertification views instead of only in the Summary views.

*Work Planned (June 1st - June 30th)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Budget Submission – Integrate new EOC spreadsheets into detach/merge process. Discussion needed on this process before going forward.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (May 1st - May 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (June 1st - June 30th)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (May 1st - May 31st)*

- Continued providing routine project management oversight, including developing monthly technical and cost reports.
- Assisted with new BAS user setup.
- Troubleshoot Tracy's IE freezing problem that has existed for a year. Resolved the issue by deleting Java 64 bit and enabling software rendering.
- Ongoing management and maintenance of all physical servers and server VMs.
- OneDrive is configured for use via web browser and manually upload. Backups to OneDrive started May 12<sup>th</sup>. Backups on OneDrive exist daily from May 10<sup>th</sup> to current. Validated the download and unzipping of the backup to the KeyLogic site. Restoration of the BAS database dump was successful.
- Backup verification and space management. NAS still has adequate space.
- Troubleshoot slower performing Oracle server as compared to Oracle Test server. No glaring problems/errors on the production server.
- Assisted Tracy with finding computer hardware on the property list.
- Submitted request to add RDP access via AAA vpn to the Oracle dev box.
- Started working on a migration plan for the file server. The file server is an old out of warranty box that is running on Windows Server 2003. Potomac Yards to provide hosted VM at no cost and also handle backups and server OS maintenance.
- Began configuration of Vegas server as DR standby.
- Worked on list of BAS users who could potentially have local BAS installs.

### *Work Planned (June 1st - June 30th)*

- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Create BAS Backups to OneDrive procedure document.
- Deliver file server migration plan to Jackye H. for moving to hosted VM at Potomac Yards before 6/12/2015.
- Provide BAS local install user list to EZTech to facilitate the hardware refresh for those users.
- Assist Laurel Ajabi with Captivate install on desktop computer. See if we have additional RAM for that machine since it only has 2 GB.
- Jackye H sent licenses/information for Everything Helpdesk. Read through the documentation and identify what is needed to get the product up and running.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Comment on or approve requirements traceability, quality management, and test management plans.

### *Work Performed (May 1st - May 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of Microsoft Azure Cloud service offering.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Investigated automated regression testing tools. Wrote some macros as proof of concept. This will reduce the length of time required for manual regression testing.
- Continued to review the BFS DR plan.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests.
- Design and Review meetings:
  - Continued participating in numerous meetings for different modules such as Modeling, Bulk Data Operations, and new ACS code structure for RDE and reports.
  - Internal discussions on Modeling, data migration between various databases, Goal-Obj-Subobj report, ETL from BFS to BAS.

- Continued working on implementing ways to use pattern based approaches to managing metadata and designing procedures that are based on these patterns.
- Worked to design approach to retrieving generated database object names for use in the application.
- Worked on the following ETL processes: Budget Version, Key Program, Fact Key, Program Resources, Modeling (Header and Detail tables), Move Budget Versions data from BFS to BAS.
- Created spreadsheet containing data from 6 Budget versions and sent it for client review.
- Created spreadsheet containing data from 2 Key Program versions and sent it for client review.
- Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same – Added missing org codes and program area info for PRCs, missing RPIO Activity).
- Created a document for logging at the database level.
- Data Capture:
  - Continued building database objects needed to support reporting and Bulk Data operations.
  - Continued building database objects needed to support modeling processes.
  - Data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
- System development and support:
  - Continued to work on processes for more rapid QA and correction of metadata.
  - Continued with creation of metadata load processes and procedures.
  - Developed SQL stored procedures to implement multi-row data commits from the application.
  - Continued work on testing the Ref Data Maintenance module and resolving issues.
  - Continued work on resolving issues for Version Management/Selection.
  - Continued working on Modeling Module screens including validation.
  - Implemented changes in different modules to resolve the issues surfaced after Security implementation.
  - Fixed issue that was caused by single quotes in CRUD parameters for grids.
  - Troubleshoot 'duplicate entitlements' issue on Version Management screen.

*Work Planned (June 1st - June 30th)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4 requirements.
- Continue to work on system testing and implementation.
- Work on facilitating the import of BFS budget data into BAS so that modeling can be done in BAS and the results exported back to BFS.



- Complete design and implementation of the Reporting module.
- Support on rolling on drop 1 version of the RDE.
- Rollout drop 1 versions of Bulk Data (version copy, merge, transformation, delete, factor, reset) system functions.
- Ongoing work to implement pattern-based metadata maintenance, the transformation process and modeling design and implementation.
- Work on the items that came out of the UAT session.
- Data Capture:
  - Finish building out metadata objects needed to support report processes.
  - Complete metadata entry for Modeling module.
- System development and support:
  - Complete multi-row commit logic.
  - Complete bulk and transformation modules.
  - Complete integration with Query Building module.
  - Support back and forth movement of BFS versions to BAS for modeling.
  - Continue working on Modeling screens functionality.
  - Continue working on the Items on the UAT results list.
  - Finalize Fund/Approp/Subapprop RefData creation.
  - Complete SQL Build logic.

## PROJECT DELIVERABLES

For the reporting period May 1<sup>st</sup> – May 31<sup>st</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Data dump of 6 versions converted from BAS to BFS. (BudgetResources6versions.xlsx)	5/4/2015
2nd Quarter Reprogramming Reports (5_7_2015 Congr_Quarterly NOA (with codes).xlsx) (5_7_2015 Congr_Quarterly NOA.xlsx)	5/7/2015
Q1 FY 2014 Reports (Quarterly Hill 5_7_2015 Dec v3.3xlsx) (Quarterly Hill 5_7_2015 Dec v3.xlsx)	5/7/2015
Hill Technical April Monthly 7.0 (Hill Technical Monthly 5_7_2015 (with codes).xlsx) (Hill Technical Monthly 5_7_2015.xlsx)	5/7/2015
April 2015 project status and cost reports (EPA-CFO_April_2015_Status.doc, EPA OCFO BAS cost report April 2015.xlsx)	5/12/2015
Mockup of a potential BFS dashboard (BFS Dashboard.pdf)	5/27/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report June 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**July 9, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (June 1st - June 30th)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (July 1st - July 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

#### *Work Performed (June 1st - June 30th)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, and update or create action items based on info that came out of the meetings.
- Disaster Recovery update meeting held with EPA.
- Additional testing using the One drive download for the backup files to KeyLogic, the file combine of downloaded files with 7-Zip software, and the combined file with import into the BASAPP\_DEV and BASAPP accounts at KeyLogic.

#### *Work Planned (July 1st - July 31st)*

- Schedule a Disaster Recovery exercise.
- Continue to finalize the process for EPA Oracle backups.
- Continue to document the process to use the One Drive for getting backups to KeyLogic.
- Schedule a Monthly Status meeting.

### **Subtask 1.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

#### *Work Performed (June 1st - June 30th)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Fixed the issue with Appropriation filter on Key Programs Adhoc Grid reports, tested and delivered.
- Created a spreadsheet for NPM/RPIO links and sent to BFS developers.
- Provided support to EPA on how to implement rescissions in Reprogramming Module.
- Problem with recently created Versions info not showing on Standard reports fixed, tested and delivered.

#### *Work Planned (July 1st - July 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

### **Subtask 1.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (June 1st - June 30th)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

#### *Work Planned (July 1st - July 31st)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

### **Subtask 1.7 Training**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (June 1st - June 30th)*

None

#### *Work Planned (July 1st - July 31st)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

### **Subtask 1.8 Documentation**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (June 1st - June 30th)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.

- Continued maintaining BAS change control log.

*Work Planned (July 1st - July 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (June 1st - June 30th)*

None

*Work Planned (July 1st - July 31st)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

*Work Performed (June 1st - June 30th)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.

- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).

*Work Planned (July 1st - July 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need response on copying bids from one FY to another with the same strategic plan.

*Work Performed (June 1st - June 30th)*

- None



*Work Planned (July 1st - July 31st)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Decision pending on adding the ability to copy of Bids across FY within the same Strategic Plan.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.

**Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (June 1st - June 30th)*

None

*Work Planned (July 1st - July 31st)*

None

**Subtask 2.7 Training**

No activity during the reporting period.

**Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (June 1st - June 30th)*

- None

*Work Planned (July 1st - July 31st)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (June 1st - June 30th)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 8.0).
- Added general rules for Y fund into nightly import tables.
- Loaded revised Paid Obligs data into 5.0 2013 ACT 16.9.
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on BAS SQL Server, F5 and BAS Oracle server.

Work performed by Fed Sight subcontractor for the period Jan 1 – Feb 11, 2015 and billed in May 2015:

- Provided 75 simultaneous user subscriptions to FEDSIGHT reports and analytical models accounts include: OARS IO, OARS EMD, OARS TMD, OARS BED, and OARS HMD.
- Provided Ad hoc support for multiple ad hoc analysis requests related to budget, contracts, travel, FTE utilization, status of funds, and other areas.
- Extracted data from CDW and OMIS and updated complete data sets and conducted quality assurance reviews and testing.
- Supported multiple briefings with EPA ORD OARS leadership related to FEDSIGHT configuration, tool enhancement, and change management.
- Researched potential data sources for submitted/unpaid invoices based on conversations with OCFO and reviews of CDW data sources.
- Initiated discussions with EPA and prime contractor in re potential approaches to directly connect to EPA/ORD data sources.
- Traveled to EPA ORD Research Triangle Park (RTP) to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Traveled to EPA ORD Washington, D.C. location to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Configured FEDSIGHT on EPA ORD servers and refreshed system with latest EPA ORD dataset from CDW and OMIS.
- Participated in multiple review meetings with ORD OARS project sponsor and OSIM leadership to discuss path forward and required information.
- Provided support for system architecture and system security requests for information from OARS project sponsor and OSIM coordinator.
- Provided support for IT Investment review process including requirements documentation, system lifecycle information, and associated documents.
- **Deliverables: Access to FEDSIGHT via subscriptions and Briefing Materials**

*Work Planned (July 1st - July 31st)*

- Continue to support budget/finance related reports, as requested by client.

**Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (June 1st - June 30th)*

None

*Work Planned (July 1st - July 31st)*

- Support OCFO staff as requested.

**Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (June 1st - June 30th)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Answered some general support questions about Lotus notes related to accessing databases now that server is at RTP.
  - 2015 OCFO Recertification DB (Pat Wingfield)
    - Answered question for Joe Layman about the recertification database workflow and the fact that the person changed this year. Training issue for user questioning work flow.

*Work Planned (July 1st - July 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Support of existing databases.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (June 1st - June 30th)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (July 1st - July 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (June 1st - June 30th)*

- Continued providing routine project management oversight, including developing monthly technical and cost reports.
- End user support and software updates pushed via BigFix management agents.
- Provided end user desktop support:
  - Talitha printer install.
  - Install and configure backup printer for Michelle.
  - Troubleshoot Laurel's COOP machine that won't boot.
  - Troubleshoot TLS security error.
- Ongoing management and maintenance of all physical servers and server VMs.
  - Iomega StorCenter firmware update.
  - Citrix performance maintenance.
  - Disable RC4 on production Citrix box to include testing.
  - Oracle test server DNS problem identification and correction.
- OneDrive backups.
  - Upload BAS nightly backups to OneDrive.
  - Changed compression method for the backup file. Original file zipped was 2.8 GB which required file to be split into 3 files in order to upload to OneDrive. Tested various 7-zip compression methods and implemented one that compressed backup file to 1.6 GB. The file takes 1/6 the time to create, don't have to split the archive into 3 files, and saves bandwidth and time to upload to

OneDrive.

- Backup verification and space management. NAS still has adequate space.
- Assisted Tracy with inventory audit. Also inquired with Tracy about turning in very old Blackberries.
- Followed up on request to add RDP access via AAA VPN to the Oracle test box. Request processed and port opened for RDP.
- Inquired with OEI Potomac Yard about hosted VM for file server. Started process in April, still have not received a VM. I have received no response to my email inquiries about status. We must decommission the 2003 file server by 7/14/2015.
- ArcSight Logger inquiry and request. ArcSight install and configuration on the servers. Waiting to get console access. With console access we will be able to show that we review server logs and remediate problems.
- InfraView SNMP reporting inquiry and request. InfraView installed and configured. We now have access to the InfraView portal and will be working to set up notification alerts for when servers or specific services go offline or are experiencing problems.
- Apply BAS updates.
- 

*Work Planned (July 1st - July 31st)*

- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Create BAS Backups to OneDrive procedure document.
- Migrate file server from Windows 2003 to Windows 2008 or 2012.
- Reimage COOP machines with Windows 7 so we can install local copy of Office 2013.
- Get Helpdesk up and running.
- Configure InfraView notification alerts.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

*Client Actions/Decisions Required*

- Comment on or approve requirements traceability, quality management, and test management plans.

*Work Performed (June 1st - June 30th)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of Microsoft Azure Cloud service offering.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued to review the BFS DR plan.

- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests.
- Design and Review meetings:
  - Continued participating in numerous meetings for different modules such as Modeling, Bulk Data Operations, Reports and new grids.
  - Internal discussions on User security, implementing security requirements, and data migration between various databases - ETL from BFS to BAS.
  - Continued working on implementing ways to use pattern based approaches to managing metadata and designing procedures that are based on these patterns.
  - Worked on screen design for Resource Modeling screens.
  - Developed stored procedures and data structure to retrieve generated database object names for use in the application.
  - Worked on the following ETL processes: Budget Version, RPIO
  - Defined 1, RPIO Defined 2, Fund, Modeling (Header and Detail tables), Move Budget Versions data from BFS to BAS.
  - Identified missing xwalk data for Orgs for 340 Budget versions using ETL package; created a spreadsheet and sent it for client-review.
  - Developed the mechanism for passing of Version Id as a parameter from table to SSIS package.
  - Developed mechanism to integrate User information in the ETL packages.
  - Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same – Added missing org codes and program area info for PRCs, missing RPIO Activity).
- Data Capture:
  - Continued building database objects needed to support modeling processes.
  - Data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
  - Completed building database objects – stored procedures, user-defined types, tables, and functions – used in Bulk Data operations.
  - Added new generated object types for Bulk Data operations and for the Transformation system function.
  - Added capture of the “Modified By User” to CRUD procedures throughout the application; also capture of the Modification Date.
  - Worked on writing code for the dynamic generation of Modeling screens that will have configurable rollup and label columns.
  - Added an Is Null flag to hierarchy tables where more than one null row is needed for representing null values and populated the data needed to implement this.
- System development and support:
  - Continued to work on processes for more rapid QA and correction of metadata.
  - Continued with creation of metadata load processes and procedures.
  - Continued work on testing the Ref Data Maintenance module and resolving issues.

- Continued work on resolving issues for Version Management/Selection.
- Continued working on Modeling Module screens including validation.
- Implemented changes in different modules to resolve the issues surfaced after Security implementation.
- Participated in troubleshooting of the 'duplicate entitlements' issue on Version Management screen.
- Worked on implementing a way to set a version status within the Version Status screen that would override all other user permissions.
- Customization of the Header Filters in grids.
- Debugging of Version Management/Selector grids according to UAT items.
- Addition of Modified By and Modified Date to the grids.
- Fixed validation issue for Version Number with no decimals in Version Management grid.
- Insertion of Rollup Columns when new Base Cost is created.
- Worked on creation of Base Cost Details with Rollups.
- Export issue on Modeling multiple grids fixed.
- Worked on creation/mods to base classes for Modeling Complex Grids.
- Incorporated stored procedure for Modeling Base Cost Details (Base Cost Adjustment screen) for display of the data by grid id, base cost id and for actual creation of base cost details based on rollups.

*Work Planned (July 1st - July 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4 requirements.
- Continue to work on system testing and implementation.
- Work on defining all needed Grid Types and establishing clear Grid naming conventions.
- Support on rolling on drop 1 version of the RDE.
- Rollout drop 1 versions of Bulk Data (version copy, merge, transformation, delete, factor, reset) system functions.
- Ongoing work to implement pattern-based metadata maintenance, the transformation process and modeling design and implementation.
- Work on the items that came out of the UAT session.
- Data Capture:
  - Finish building out metadata objects needed to support report processes.
  - Complete metadata entry for Modeling module.
  - Complete Fact Key Program Resource data entry screen.
- System development and support:
  - Complete multi-row commit logic.
  - Complete bulk and transformation modules.
  - Complete integration with Query Building module.
  - Support back and forth movement of BFS versions to BAS for modeling.

- Continue working on Modeling screens functionality.
- Continue working on the Items on the UAT results list.
- Finalize Fund/Approp/Subapprop Ref Data creation.
- Complete SQL Build logic.
- Continue work on creating the Fact Key Program Data entry screen.



## PROJECT DELIVERABLES

For the reporting period June 1<sup>st</sup> – June 30<sup>th</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Front-end files containing modifications to the appropriation filter on KP grid reports. (basbuild_06022015.basadhoc.zip)	6/2/2015
Hill Technical Monthly & Quarterly May 2015 act 8.0 (Hill Technical Monthly 6_4_2015.xlsx) (Hill Technical Monthly 6_4_2015 (with codes).xlsx) (Quarterly Hill 6_4_2015)	6/4/2015
May 2015 project status and cost reports (EPA-CFO_May_2015_Status.doc, EPA OCFO BAS cost report May 2015.xlsx)	6/12/2015
Disaster Recovery Meeting Action Items (DRStatusMeeting 6_18_2015.doc)	6/22/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report July 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**August 10, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (July 1st - July 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (August 1st - August 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

#### *Work Performed (July 1st - July 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, update or create action items based on info that came out of the meetings.
- Disaster Recovery meeting scheduled and held with EPA.
- Testing using the BAS front end on the EPA Test server where the database was restored from a backup that used the One drive compression process - all tests passed.

#### *Work Planned (August 1st - August 31st)*

- Schedule a Disaster Recovery exercise.
- Additional testing needs to be done to finalize the process for EPA Oracle backups.
- Update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Continue to finalize the process for EPA Oracle backups.
- Schedule a Monthly Status meeting.

### **Subtask 1.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

#### *Work Performed (July 1st - July 31st)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Provided information to the client on front end security, in particular how passwords are tracked, how expiration dates are implemented, how many incorrect entries will cause the account to be locked, what the duration is for password changes and how strong the passwords are.
- Fixed the problem with version info not showing on the reports for recent versions, tested and delivered.
- Modifications for the security requirements – changed the amount of invalid logon attempts to 3, tested and delivered.
- Assisted the client with reassigning users to different groups.
- Provided information to the client on what the database settings are for changing account passwords and duration between changes,
- Provided information to the client on logs gathered on user account activity, and how/if suspicious attempts to access the database are tracked.

- Provided information to the client on backup processes and BAS application software and hardware configurations.
- Modified user password algorithm so that the user is locked out and notified immediately after his/her 3<sup>rd</sup> failed attempt to log in instead of before the 4<sup>th</sup>.

*Work Planned (August 1st - August 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

### **Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (August 1st - August 31st)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

### **Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

None

*Work Planned (August 1st - August 31st)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

### **Subtask 1.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

*Work Planned (August 1st - August 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

None

*Work Planned (August 1st - August 31st)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

#### *Work Performed (July 1st - July 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).

#### *Work Planned (August 1st - August 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

- Need response on copying bids from one FY to another with the same strategic plan.

#### *Work Performed (July 1st - July 31st)*

- None

#### *Work Planned (August 1st - August 31st)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Decision pending on adding the ability to copy of Bids across FY within the same Strategic Plan.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.

### **Subtask 2.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (July 1st - July 31st)*

None

#### *Work Planned (August 1st - August 31st)*

None

### **Subtask 2.7 Training**

No activity during the reporting period.

### **Subtask 2.8 Documentation**

#### *Client Actions/Decisions Required*

None



*Work Performed (July 1st - July 31st)*

- None

*Work Planned (August 1st - August 31st)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 9.0) and SNC report for FY 2015 Quarter 3.
- Worked on 9T issue.
- Co-ordinated with Infrastructure team for SQL 2000 server setup.
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on CDW, BAS SQL Server, F5 and BAS Oracle server.

Work performed by Fed Sight subcontractor for the period Jan 1 – Feb 11, 2015 and billed in May 2015:

- Provided 75 simultaneous user subscriptions to FEDSIGHT reports and analytical models accounts include: OARS IO, OARS EMD, OARS TMD, OARS BED, and OARS HMD.
- Provided Ad hoc support for multiple ad hoc analysis requests related to budget, contracts, travel, FTE utilization, status of funds, and other areas.
- Extracted data from CDW and OMIS and updated complete data sets and conducted quality assurance reviews and testing.
- Supported multiple briefings with EPA ORD OARS leadership related to FEDSIGHT configuration, tool enhancement, and change management.
- Researched potential data sources for submitted/unpaid invoices based on conversations with OCFO and reviews of CDW data sources.
- Initiated discussions with EPA and prime contractor in re potential approaches to directly connect to EPA/ORD data sources.
- Traveled to EPA ORD Research Triangle Park (RTP) to support face-to-face meetings and conduct FEDSIGHT review sessions.
- Traveled to EPA ORD Washington, D.C. location to support face-to-face meetings and conduct FEDSIGHT review sessions.

- Configured FEDSIGHT on EPA ORD servers and refreshed system with latest EPA ORD dataset from CDW and OMIS.
- Participated in multiple review meetings with ORD OARS project sponsor and OSIM leadership to discuss path forward and required information.
- Provided support for system architecture and system security requests for information from OARS project sponsor and OSIM coordinator.
- Provided support for IT Investment review process including requirements documentation, system lifecycle information, and associated documents.
- **Deliverables: Access to FEDSIGHT via subscriptions and Briefing Materials**

*Work Planned (August 1st - August 31st)*

- Continue to support budget/finance related reports, as requested by client.

#### **Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

None

*Work Planned (August 1st - August 31st)*

- Support OCFO staff as requested.

#### **Task 5: Administrative Database Application Development and Maintenance**

*Client Actions/Decisions Required*

- None

*Work Performed (July 1st - July 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Answered some general support questions about Lotus notes related to accessing databases now that server is at RTP.

- OB Main Menu / Budget Submission DB (Multiple contacts)
  - EPA Moved the DCAPPS3 server from DC to RTP over a weekend but we weren't notified. This caused a few database to become inaccessible.
  - Moved Budget Submission database to DCOCFONOTES01 server permanently.
  - Got access back for OB Main Menu. Going to move it soon too.
- Budget Submission DB (Talitha Lindo)
  - Created new document titles and added them to the pick list on the tab 12 document form.
  - Supplied link to database a few times for folks who were having problems. Sent link using IP address and that worked. Once people open a link via the IP, the name will work again.
- RPROS Data Call/Response Database
  - Answered some questions regarding security of the database. People were complaining that they can't see the data call documents or the responses. The problem was that these people were not in the appropriate groups in Lotus Notes.
- 2015 OCFO Recertification DB (Joe Layman/Pat Wingfield)
  - Answered question for Pat Wingfield about the recert database and notifications that happen in the workflow. The notification names were not all populated and therefore an error was thrown.

*Work Planned (August 1st - August 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Support of existing databases.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

*Client Actions/Decisions Required*

None

*Work Performed (July 1st - July 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

*Work Planned (August 1st - August 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (July 2015)*

- End user support and software updates pushed via BigFix management agents.
- Provided end user desktop support:
  - Printer troubleshooting.
  - Configure new user local machine BAS setup.
  - Assist new users with Lotus notes configuration.
- Ongoing management and maintenance of all physical servers and server VMs.
- OneDrive backups.
  - Upload BAS nightly backups to OneDrive.
- Backup verification and space management. NAS still has adequate space.
- Obtained and tested privileged user card (PUC).
- Worked on Server 2003 upgrades for file server and SQL database server.
- Apply BAS updates.

### *Work Planned (August 2015)*

- Migrate file server from Windows 2003 to Windows 2012. Target 8/14/2015.
- Migrate SQL database server from Windows 2003 to Windows 2008. Target 8/7/2015.
- Reimage COOP machines with Windows 7 so we can install Office 2013. There is also a mandate for those users to utilize their PIV cards from outside the office.
- Get Everything Helpdesk up and running.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Comment on or approve requirements traceability, quality management, and test management plans.

### *Work Performed (July 1st - July 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of Microsoft Azure Cloud service offering.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and

- user interface functionality.
- Continued to review the BFS DR plan.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests.
- Design and Review meetings:
  - Continued participating in numerous meetings for different modules such as Modeling, Bulk Data Operations, Reports and new grids.
  - Internal discussions and meetings internally on Modeling Rollups, Rollup Columns, Base Costs, Scenarios, Cost Allocation process, User security, data migration between various databases, ETL from BFS to BAS.
  - Continued working on implementing ways to use pattern based approaches to managing metadata and designing procedures that are based on these patterns.
  - Completed initial design work on modeling; all other design work done on the go as the system was being developed and problems encountered.
  - Designed means and flow to save display factors and dollar adjustments, calculate all adjustments, accept user adjustments factors and apply them to data displayed.
  - Worked on the following ETL processes: Modeling (Model Base, Model Base Detail data), Scenario, Model Base Rollup Column, App Table Column.
  - Created Modeling-related tables and constraints.
  - Created missing RCs, AH, RPIO, Orgs from a spreadsheet.
  - Moved Model Source, Model Source Detail, Model Base data from Staging to BFSTempTest area.
  - Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same.
- Data Capture:
  - Continued building database objects needed to support modeling processes.
- System development and support:
  - Continued to work on processes for more rapid QA and correction of metadata.
  - Continued with creation of metadata load processes and procedures.
  - Continued work on testing the Ref Data Maintenance module and resolving issues.
  - Continued work on resolving issues for Version Management/Selection.
  - Continued working on Modeling Module screens including validation.
  - Implemented changes in different modules to resolve the issues surfaced after Security implementation.
  - Participated in troubleshooting of the 'duplicate entitlements' issue on Version Management screen.
  - Worked on implementing a way to set a version status within the Version Status screen that would override all other user permissions.
  - Customization of the Header Filters in grids.
  - Debugging of Version Management/Selector grids according to UAT items.
  - Addition of Modified By and Modified Date to the grids.

- Insertion of Rollup Columns when new Base Cost is created.
- Worked on creation of Base Cost Details with Rollups.
- Completed creation of Model Base details from source data based on user selected rollups.
- Completed design and creation of application code, stored procedures, and metadata to display Model Base detail records and accept and apply user adjusted costs-per-fte.
- Completed design and coding of application code, stored procedures, and metadata to create Model Scenarios and associated labels.
- Completed design and coding of application code, stored procedures, and metadata to calculate adjustments within Scenarios and accept user adjustments and apply those across multiple different filtered sets of data.
- Completed design and coding of application code, stored procedures, and metadata to display calculated adjustments as applied to a source budget version, and to apply proration to displayed data.
- Completed design and coding of application code, stored procedures, and metadata to apply the adjusted data to a target budget version, overwriting existing data in the target version as needed.

*Work Planned (August 1st - August 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to work on documents needed to meet EPA SLCM Control Gates 3 and 4 requirements.
- Continue to work on system testing and implementation.
- Allocation system design.
- Begin planning and design work for Performance subsystem
- Ongoing work to implement pattern-based metadata maintenance
- Work on the items that came out of the UAT session.
- Ongoing work on defining all needed system enumerations
- Ongoing work to establish clear Grid naming conventions.
- Data Capture:
  - Finish building out metadata objects needed to support report processes.
- System development and support:
  - Continue working and finalize Modeling screens functionality.
  - Continue working on the Items on the UAT results list.
  - Finalize Fund/Approp/Subapprop RefData creation.
  - Complete SQL Build logic
  - Continue work on creating the Fact Key Program Data entry screen.
  - Continued work on identifying metadata patterns and implementing processes to automate metadata management
  - Continue working on standardizing screen appearance in different modules.



## PROJECT DELIVERABLES

For the reporting period July 1<sup>st</sup> – July 31<sup>st</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
Front-end files containing modifications to the Versions info not displayed on reports. (basbuild_07_01_2015.basadhoc.zip) (basbuild_07_01_2015.basrpts.zip)	7/1/2015
2015 Quarterly Hill Macro (QuarterlyHillMacro.xlsm)	7/7/2015
June 2015 project status and cost reports (EPA-CFO_June_2015_Status.doc, EPA OCFO BAS cost report June 2015.xlsx)	7/9/2015
Front-end files containing modifications to change users number of invalid password attempts. (basbuild_07_20_2015.bassecty.zip)	7/20/2015



# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report August 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**September 11, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (August 1st - August 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (September 1st - September 30th)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

### *Work Performed (August 1st - August 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, update or create action items based on info that came out of the meetings.
- Meeting scheduled and held at EPA for performing a COOP exercise in the near future.
- Worked on creating a DR test exercise for testers to follow.
- Worked on updating the backup processes that have changed and that are currently in use – created steps to follow to log onto One drive, for downloading backups from One Drive and for using 7-Zip to unzip the backup file properly.
- Updated the current DR plan to reflect backup process changes and configuration changes.

### *Work Planned (September 1st - September 30th)*

- Schedule a Disaster Recovery exercise.
- Additional testing needs to be done to finalize the process for EPA Oracle backups.
- Continue to update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Continue to finalize the process for EPA Oracle backups.
- Schedule a Monthly Status meeting.

## **Subtask 1.5 Enhancing System Functionality**

### *Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

### *Work Performed (August 1st - August 31st)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Provided information to the client on complications when Allowance Holders titles are being changed – that will affect Bidding Offices in ACS.
- Support on using PM/Program Project Linking screen.
- Allocated Grid Reports Totals mismatch with Direct reports issue analysis.
- Assisted the client with Key Programs Import, Baseline screen and Performance Measures Data Entry issues.
- Delivered the dll that was missing on Citrix and Production that fixed the problem with Superuser not seeing Private Base Costs and Scenarios.

- Provided information to the client for outside users of the BAS data to connect to the BAS test server for testing new functionality of their applications.

*Work Planned (September 1st - September 30th)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

**Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (September 1st - September 30th)*

KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

**Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

None

*Work Planned (September 1st - September 30th)*

KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

**Subtask 1.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

*Work Planned (September 1st - September 30th)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

None

*Work Planned (September 1st - September 30th)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

### *Work Performed (August 1st - August 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).

### *Work Planned (September 1st - September 30th)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need response on copying bids from one FY to another with the same strategic plan.

*Work Performed (August 1st - August 31st)*

- None

*Work Planned (September 1st - September 30th)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Decision pending on adding the ability to copy of Bids across FY within the same Strategic Plan.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.

**Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

None

*Work Planned (September 1st - September 30th)*

None

**Subtask 2.7 Training**

No activity during the reporting period.

**Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

- None

*Work Planned (September 1st - September 30th)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 10.0)
- Worked on BAS EOY tasks document.
- Worked on creation of nightly import package for FY 2016.
- Co-ordinated with Infrastructure team for SQL 2000 server setup, access issues.
- Worked on diagnosing and troubleshooting problems with the nightly import.
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on CDW, BAS SQL Server, F5 and BAS Oracle server.

*Work Planned (September 1st - September 30th)*

- Continue to support budget/finance related reports, as requested by client.

### **Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (August 1st - August 31st)*

None

*Work Planned (September 1st - September 30th)*

- Support OCFO staff as requested.



## **Task 5: Administrative Database Application Development and Maintenance**

### *Client Actions/Decisions Required*

- None

### *Work Performed (August 1st - August 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Answered some general support questions about Lotus notes related to accessing databases now that server is at RTP.
    - Moved any existing databases from DCAPPS3 server to DCAOESO1 server.
    - Reset my RSA Token PIN.
  - OB Main Menu (Jackye Herzfeld)
    - Moved OB Main Menu database to DCAOESO1 server permanently.
    - Updated external db profiles documents so that all previously existing DCAPPS3 server references are changed to DCAOESO1.
  - Budget Submission DB (Talitha Lindo)
    - Debugged some issues with export/merge process and formatting.
    - Assisted Valerie Wright and Talitha with a few issues including creating new documents for specific tab.
    - Answered a question regarding the green rows of response documents in the database and what should be done prior to final merge.
    - Answered a question about undeleting documents for Rebecca Muse.
  - RPROS Data Call/Response Database ()
    - Helped James Ujcic with updating primary and secondary analyst data which is stored in the OB Main Menu db.
    - Assisted with some other access issues to this database.
  - Open Commitment DB (Richard Blackman)
    - Added a new column to an existing view to display the FUND code when needed.
    - Enabled the second daily run of the data load job.
  - Training Enrollment DB (Richard Blackman)
    - Moved database to DCAOESO1 server and notified Richard.
  - 2015 OCFO Recertification DB (Joe Layman/Pat Wingfield)
    - Helped Pat obtain access for a couple other folks who should have had it.

### *Work Planned (September 1st - September 30th)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:

- Support of existing databases.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (August 1st - August 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (September 1st - September 30th)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (August 1<sup>st</sup> – August 31<sup>st</sup>)*

- End user support and software updates pushed via Big Fix management agents.
- Provided end user desktop support:
  - Printer troubleshooting.
  - Configure new user local machine BAS setup.
  - Assist new users with Lotus notes configuration.
- Ongoing management and maintenance of all physical servers and server VMs.
- OneDrive backups.
  - Upload BAS nightly backups to OneDrive.
- Backup verification and space management. NAS still has adequate space.
- Worked on Server 2003 upgrades for file server and SQL database server.
- Apply BAS updates.

### *Work Planned (September 1<sup>st</sup> – September 30<sup>th</sup>)*

- Migrate file server from Windows 2003 to Windows 2012. Target 8/14/2015.
- Reimage COOP machines with Windows 7 so we can install Office 2013. There is also a mandate for those users to utilize their PIV cards from outside the office.

- Get Everything Helpdesk up and running.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Comment on or approve test management plan.

### *Work Performed (August 1st - August 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued researching details of Microsoft Azure Cloud service offering.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued to review the BFS DR plan.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests.
  - Reviewed and prepared responses to EPA comments on QMP.
- Design and Review meetings:
  - Internal discussions and meetings internally on Modeling Rollups, Rollup Columns, Base Costs, Scenarios, Cost Allocation process, User security, data migration between various databases.
  - Thorough review of existing Allocations process and the new requirements.
  - Design meetings on the new allocations process.
  - Design of state machine for the allocations process.
  - Worked on the following ETL processes: Modeling (Model Source, Model Source Detail data), Scenario, Scenario Detail Factor, Model Adjustment Label,
  - Created Modeling-related tables and constraints.
  - Moved Model Adjustment Label, Model Scenario, Model Scenario Detail Factor, Model Rollup Column data from Staging to BFS Temp Test area.
  - Investigated duplicate records in Budget Versions data, identified the cause for the same (incomplete xwalk data) and let the client know.
  - Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same.
- Data Capture:
  - Continued building database objects needed to support modeling processes.
  - Continued working on data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.

- System development and support:
  - Continued to work on processes for more rapid QA and correction of metadata.
  - Continued with creation of metadata load processes and procedures.
  - Implemented changes in different modules to resolve the issues surfaced after Security implementation.
  - Deletion of Adj Labels that were just created.
  - Fixed the list of Rollups (has unrelated options)
  - Fixed Sorting issue ( do not sort on numeric values)
  - Fixed the problem with Objective not working as rollup on base cost details creation.
  - Implemented different approach of Source and Target version selectors on Scenario Details and Scenario Applied Screens.
  - Removed tabs when there is only one tab page accordingly ( for existing Base Cost and new Scenario).
  - Version Management Edit form – buttons appearance made consistent with other forms.
  - Ref Data Management Edit form – buttons appearance made consistent with other forms.
  - Save As New Scenario from Scenario Details Screen function completed.
  - Base Cost details can be created if any of the IT Project fields are selected as Rollups.
  - Timeout issue on Scenario Details screen fixed using a profiler trace to find which additional indexes to create.
  - Participated in troubleshooting of the ‘duplicate entitlements’ issue on Version Management screen.
  - Addition of Modified By and Modified Date to the grids.
  - Completed creation of Base Cost Details with Rollups.
  - Completed creation of Model Base details from source data based on user selected rollups.
  - Completed design and creation of application code, stored procedures, metadata to display Model Base detail records and accept/apply user adjusted costs-per-fte.
  - Completed metadata entry for the Fact Key Program Resources grid.

*Work Planned (September 1st - September 30th)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to prepare SLCM documentation.
- Continue to work on system testing and implementation.
- Complete Allocation system design.
- Complete metadata for Target and Key Program version grids.
- Create metadata to define a default grid for each version type.
- Create all “generated” code and objects to support import and export for Key Programs and Target versions.

- Create all generated code and objects to support multi row updates for Key Programs and Target versions.
- Add required metadata to support ad-hoc reports for Key Programs and Target versions.
- Ongoing work to implement pattern-based metadata maintenance.
- Data Capture:
  - Finish building out metadata objects needed to support ESP Allocations.
- System development and support:
  - Design and buildout all structures needed to support the Allocations process.
  - Continue working on the Items on the UAT results list.
  - Finalize Fund/Approp/Sub approp Ref Data creation.
  - Complete SQL Build logic.
  - Complete work on creating the Fact Key Program Data entry screen.
  - Continued work on identifying metadata patterns and implementing processes to automate metadata management.
  - Continue working on standardizing screen appearance in different modules.
  - Work on adding new version creation functionality from Modeling Scenario Applied screen.
  - Shakeout problems and testing of the Fact Key Program Resources Grid.

## PROJECT DELIVERABLES

For the reporting period August 1<sup>st</sup> – August 31<sup>st</sup> 2015

<b><u>Deliverable</u></b>	<b><u>Date</u></b>
2017 OMB Macro - updated (CJ Macro 2015-08-10.zip)	8/10/2015
July 2015 project status and cost reports (EPA-CFO_July_2015_Status.doc, EPA OCFO BAS cost report July 2015.xlsx)	8/11/2015
Exhibit 53 Logic Sheet (2015-08-17 Exh53.pdf) (2015-08-17 Exh53.xlsx)	8/17/2015
Exhibit 53 Logic Sheet - updated (2015-08-18 Exh53.pdf) (2015-08-18 Exh53.xlsx)	8/19/2015
Front-end files containing modifications to the Baseline screen. (basbuild_08_24_2015.bassveb.zip) (basbuild_08_24_2015.bassecty.zip) (basbuild_08_24_2015.basreprog.zip) (basbuild_08_24_2015.baspmeas.zip) (basbuild_08_24_2015.baspers.zip) (basbuild_08_24_2015.bascommit.zip) (basbuild_08_24_2015.basapgeb.zip) (basbuild_08_24_2015.bascommit.zip) (basbuild_08_24_2015.basimport.zip)	8/24/2015
Front-end files containing modifications on Citrix and in production, (basbuild_08_26_2015.baspayrl.zip)	8/26/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report September 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**October 13, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (September 1st - September 30th)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (October 1st - October 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.



*Work Performed (September 1st - September 30th)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, update or create action items based on info that came out of the meetings.
- Continued to update the document that describes the process to use the One Drive for getting backups to KeyLogic.

*Work Planned (October 1st - October 31st)*

- Schedule a Disaster Recovery exercise.
- Additional testing needs to be done to finalize the process for EPA Oracle backups.
- Continue to update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Schedule a Monthly Status meeting.

**Subtask 1.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

*Work Performed (September 1st - September 30th)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Assisted users with accesses to BAS Performance data screens.
- Support on using ACT versions to OPP versions Copy and Merge.
- Support on the process of correctly running reports after Copies and Merges are done.
- Provided explanation on the Raw Payroll Data Resources precision.
- Copy of compass RPIO activities from FY2015 to FY2016.
- Provided SQL to update contents of NPM\_RPIO\_ACT\_COMPASS table

*Work Planned (October 1st - October 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

### **Subtask 1.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (September 1st - September 30th)*

- KeyLogic continued testing BAS features as system functionality was enhanced or developed.

#### *Work Planned (October 1st - October 31st)*

- KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

### **Subtask 1.7 Training**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (September 1st - September 30th)*

None

#### *Work Planned (October 1st - October 31st)*

- KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

### **Subtask 1.8 Documentation**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (September 1st - September 30th)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

*Work Planned (October 1st - October 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (September 1st - September 30th)*

None

*Work Planned (October 1st - October 31st)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

*Work Performed (September 1st - September 30th)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting

- (e.g. Statement of Net Costs, PAR, SF133, etc.).
- PAT application developer was having trouble downloading Performance Data from BAS - issue resolved .
- Credentials issue uploading Reprogramming - turned out to be a FEEDMOM issue.

*Work Planned (October 1st - October 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need response on copying bids from one FY to another with the same strategic plan.

*Work Performed (September 1st - September 30th)*

- None

*Work Planned (October 1st - October 31st)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Decision pending on adding the ability to copy of Bids across FY within the same Strategic Plan.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.

**Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (September 1st - September 30th)*

None

*Work Planned (October 1st - October 31st)*

None

**Subtask 2.7 Training**

No activity during the reporting period.

**Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (September 1st - September 30th)*

- None

*Work Planned (October 1st - October 31st)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (September 1st - September 30th)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 11.0)
- Worked on BAS EOY tasks document.
- Worked on nightly import data type document.
- Met with EPA to prepare and action plan for EOY 2015/SUY 2016 tasks.
- Worked on diagnosing and troubleshooting problems with the nightly import – available balance for 9H/9T
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on CDW, BAS SQL Server, F5 and BAS Oracle server.

#### *Work Planned (October 1st - October 31st)*

- Continue to support budget/finance related reports, as requested by client.

### **Task 4: Data Warehousing Support**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (September 1st - September 30th)*

None

#### *Work Planned (October 1st - October 31st)*

- Support OCFO staff as requested.

### **Task 5: Administrative Database Application Development and Maintenance**

#### *Client Actions/Decisions Required*

- None

*Work Performed (September 1st - September 30th)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Reviewed list of databases again and suggested which ones are candidates for migration to Sharepoint.
  - Budget Submission DB (Talitha Lindo)
    - Debugged some issues with export/merge process.
  - CATD DB (Lorna Washington)
    - Helped with getting Susan Lindenblad setup with proper access.
  - Training Enrollment DB (Richard Blackman)
    - Had some issues with people signing up for BFS training. Had to modify the code slightly to instantiate the database if normal way did not work. Not sure why this stopped working for some users as the codes has been in place for many years.

*Work Planned (October 1st - October 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Support of existing databases.

**Task 6: Hardware/Software/Peripheral Purchases/Installation**

*Client Actions/Decisions Required*

None

*Work Performed (September 1st - September 30th)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

*Work Planned (October 1st - October 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (September 1st - September 30th)*

- End user support and software updates pushed via Big Fix management agents.
- ADC IPv6 testing and configuration work and meetings. We have servers and desktops that will require IPv6 protocol configuration. The majority of our servers that we manage will not need the configuration. Any device that reaches out to the Internet for communication will require the updated configuration.
- Provided end user desktop support.
- Ongoing management and maintenance of all physical servers and server VMs.
- Upload nightly BAS backups to OneDrive online storage.
- Backup verification and space management. NAS still has adequate space.
- Planning and testing for the file server migration. Migration will take place the weekend of 10/9/2015. All data from old 2003 server will be migrated to an OEI hosted VM at Potomac Yard. Plan is to move the server from WJC North 6033 to the Potomac Yard data center, then migrate the data. Migration should be complete by 6 PM Saturday.
- Review InfraView reporting/logs for server errors and items that require maintenance. Eric and I are working on a plan for showing that logs are reviewed and problems remediated.
- Pull hard drives from numerous laptops, servers and desktops that are identified for turn-in/surplus. An additional server and 4 desktops are requested for surplus and ready for turn-in.
- Identified source for getting Win7 image on the new COOP laptops. Working with COTS team to make that happen.

### *Work Planned (October 1st - October 31st)*

- Migrate file server from Windows 2003 to hosted VM running Windows 2012 at Potomac Yard.
- Continue providing routine project management oversight, including developing monthly technical and cost reports.
- Reimage 4 new COOP machines with Windows 7 Enterprise image.
- Get Everything Helpdesk up and running.



## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Comment on SLCM documentation changes needed for future releases.

### *Work Performed (September 1st - September 30th)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued to review the BFS DR plan.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests.
  - Prepared for EPA SLCM documentation plan for future releases; responded to initial comments
  - Incorporated EPA comments and prepared final QMP.
  - Reviewed document related to best practices in federal budgeting.
  - Prepared background material on Broadcasting Board of Governors' budget for BFS system demo.
- Design and Review meetings:
  - Internal discussions and meetings with EPA on Org xwalk process, user security, and data migration between various databases.
  - Continued on designing Allocations process accordingly to the new requirements
  - Continued design meetings on the new allocations process.
  - Continued design of state machine for the allocations process.
  - Designed mechanism for default grids for version types.
  - Designed metadata mechanism for anchoring grid columns.
  - Initial work on where to inject agency specific custom code in complex BFS modules.
  - Worked on the following ETL processes: Fact Budget Resources, NPM, Org, RPIO, AH, RC, Detailed Costs, Agency Wide Activity, NPM Activity, XWalkOrg, Budget Version, Country State Tribe, RPIO Defined1, Modeling (Model Source detail, Model Source Detail data) and PRC.
  - Created Modeling-related tables default values and constraints.
  - Ran the ETL for 339 versions for Fact Budget Resources; Identified and created missing PRCs and other dimension data; Troubleshooting of related issues
  - Had discussions and meetings internally and with clients on Org xwalk process,

- User security, data migration between various databases.
- Moved Model Source Detail, Model Base Detail, Fact Budget Resources, NPM, Org, RPIO, AH, RC, Detailed Costs, Agency Wide Activity, NPM Activity, XWalkOrg, Budget Version, Country State Tribe, RPIO Defined1 data from Staging to BFSTempTest area.
- Cleaned up and did QA for dimensions and budget version fact data.
- Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same.
- Data Capture:
  - Continued building database objects needed to support Key Program Resources reporting processes.
  - Continued working on data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
  - EPA users still working out how they want to use precision and where in modeling processes. We have settled on a scale of 10 for now. May need to add ability to store data in one precision, display on screen in another.
  - Need to provide domain of columns for us in Allocation Pools and Target Pools within the Allocations module
  - Decision finalized that missing details will accumulate in Model Base Details – thus if a user applies to multiple versions, missing details from each version will be create in Model Base Details regardless of universal applicability
- System development and support:
  - Continued shaking out the change made to all Ref Data Codes to true NULL where value is meant to be NULL. Worked with application developers to insure proper system functioning.
  - Hard coded copy forward logic for fiscal years in Budget Version copies.
  - Added logic to prevent “merge forward” bulk operations.
  - Added metadata for Target and Key Program version grids.
  - Created structure and logic to associate specific grids to version types and to define default grids for each.
  - Created all “generated” code and objects to support import and export for Key Programs and Target versions.
  - Added anchoring metadata attributes and domain to metadata structure.
  - Modified grid column values with the new anchoring data.
  - Fixed ‘Success’ alert title when the error occurs in Bulk Data operations.
  - Implemented new Target version creation on Scenario Applied Screen for Modeling.
  - Implemented the change in Export of metadata grids for Booleans to make it consistent with the screen data matching the data in the file.
  - Implemented the ability to delete Booleans from the filter in the grids header filter dropdowns in Modeling, Budget Version and RefData modules.
  - Timing Out issue was discovered and fixed on the process of saving Applied Scenario data into the Target Version.
  - Version Management Edit form – buttons appearance made consistent with other forms.

- Fixed the issue with factors refreshing for selected rows with filtered data sets and null in one of factors in the rows for one of the filtered data sets.
- Version delete function – added check for CRUD return code to prevent Entitlements to be deleted when version can't be deleted ( has resource records) and so the alert is displayed for the users. This was a requirement that apparently was added later.
- Fix for the inability to enter data into RDE with no EBFY specified.
- Implemented flagging of modified rows in Modeling screens as well as letting the user know that there is 'Unsaved Data' in the grids.
- Implemented flagging of the rows where proration was applied on Scenario Applied screen in Modeling as well letting the user know that there is 'Unsaved Data' in the grid in such case.
- Continued to work on processes for more rapid QA and correction of metadata.
- Continued on creation of metadata load processes and procedures.
- Implemented changes in different modules to resolve issues surfacing after Security implementation.
- Completed metadata entry for the Fact Key Program Resources grid.
- Created metadata for allocations rules capture grids.
- Created first pass of CRUD procedures to capture rules data for Allocations.

*Work Planned (October 1st - October 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to prepare SLCM documentation.
- Continue to work on system testing and implementation.
- Allocate system design.
- Create all generated code and objects to support multi row updates for Key Programs and Target versions.
- Add required metadata to support ad-hoc reports for Key Programs and Target versions.
- Ongoing work to implement pattern-based metadata maintenance.
- Data Capture:
  - Finish building out object and adding metadata needed for grids to work with target versions.
- System development and support:
  - Design and buildout all structures needed to support the Allocations process.
  - Continue working on the items on the UAT results list.
  - Finalize Fund/Approp/Sub approp Ref Data creation.
  - Complete SQL Build logic.
  - Continued work on identifying metadata patterns and implementing processes to automate metadata management.
  - Continue working on standardizing screen appearance in different modules.
  - Work on adding a way to save and display filter used for applying certain adjustment/factor combination in modeling.

- Shakeout problems and testing of the Fact Key Program Resources Grid.
- Continue with design of custom code injection to prevent hard codes making BFS generally usable by all agencies.
- Work with application developers to make the merge forward user error be handled in bulk data validation rather than with a mysterious error message.

## PROJECT DELIVERABLES

For the reporting period September 1<sup>st</sup> – September 30<sup>th</sup> 2015

<b>Deliverable</b>	<b>Date</b>
Exhibit 53 (2015-09-09 Exh53.xlsx)	9/3/2015
Exhibit 53 Version 4 (2015-09-03 Exh53 with v4.4.xlsx)	9/3/2015
Exhibit 53 Rerun (2015-09-03 Exh53 rerun.xlsx)	9/3/2015
Exhibit 53 PDF Data dump (2015.09.08 Exh53.pdf)	9/8/2015
CJ Macro (cj_macro.docm)	9/10/2015
August 2015 project status and cost reports (EPA-CFO_August_2015_Status.doc, EPA OCFO BAS cost report August 2015.xlsx)	9/11/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report October 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**November 13, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (October 1st - October 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (November 1st - November 30th)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

### *Work Performed (October 1st - October 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, update or create action items based on info that came out of the meetings.
- Continued to update the document that describes the process to use the One Drive for getting backups to KeyLogic.

### *Work Planned (November 1st - November 30th)*

- Schedule a Disaster Recovery exercise.
- Additional testing needs to be done to finalize the process for EPA Oracle backups.
- Continue to update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Schedule a Monthly Status meeting.

## **Subtask 1.5 Enhancing System Functionality**

### *Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

### *Work Performed (October 1st - October 31st)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Created SQL and spreadsheets for versions accesses for the analyst.
- Provided the information on Target and Official versions to the analyst.
- Assisted users with missing Fund/Approp/Subapprop combinations in BAS.
- Created headers or Raw Payroll Data in BAS per client’s request.
- Created a document with ESP Allocation reports samples for the analyst.
- Performed a special copy from OPP cycle to ACT per client’s request.
- Performed testing of the EPA Oracle test server with upgraded Oracle software for connection and performance with BAS.
- Assisted the client with figuring out the issue with Compass error.
- Provided SQL for Adhoc ESP Allocation reports to database developers.
- Provided requested security information for certain users in BAS to the analyst.
- Created versions for 2015 nightly import process in BAS.
- Did testing of the BAS front end on the EPA Test server that was upgraded to Oracle 11.2.0.4



*Work Planned (November 1st - November 30th)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

**Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

- KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (November 1st - November 30th)*

- KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

**Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

None

*Work Planned (November 1st - November 30th)*

- KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

**Subtask 1.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

*Work Planned (November 1st - November 30th)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

**Subtask 1.9 - Database Security**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

None

*Work Planned (November 1st - November 30th)*

- Maintain BAS database security as necessary.

**Subtask 1.10 - BAS System Integration with Other Administrative Systems**

*Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

### *Work Performed (October 1st - October 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).

### *Work Planned (November 1st - November 30th)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need response on copying bids from one FY to another with the same strategic plan.

*Work Performed (October 1st - October 31st)*

- None

*Work Planned (November 1st - November 30th)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Decision pending on adding the ability to copy of Bids across FY within the same Strategic Plan.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.

**Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

None

*Work Planned (November 1st - November 30th)*

None

**Subtask 2.7 Training**

No activity during the reporting period.

**Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

- None

*Work Planned (November 1st - November 30th)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 12.0)
- Did loads for 2015 ACT 13.0, 2015 ACT 14.0
- Worked on 2015 Month 14 SNC report
- Met with client to discuss EOY 2015/SOY 2016 tasks
- Worked on 2015 ACT 16.5 load for 133 Obligations
- Worked on Base Cost report for 201525-201526 and 201512
- Worked on 2016 Nightly import and related tasks
- Continued working on maintenance and infrastructure tasks such as security issues, connectivity on CDW, BAS SQL Server, F5, BAS Oracle server

*Work Planned (November 1st - November 30th)*

- Continue to support budget/finance related reports, as requested by client.

### **Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (October 1st - October 31st)*

None

*Work Planned (November 1st - November 30th)*

- Support OCFO staff as requested.

## **Task 5: Administrative Database Application Development and Maintenance**

### *Client Actions/Decisions Required*

- None

### *Work Performed (October 1st - October 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - Generic Lotus Notes support:
    - Answered more questions about which databases are best candidates for migration to SharePoint.
    - Few questions answered about accessing databases on newer server. Some people still running in to DNS error when they try to access DCAOESO1 for the first time since move to RTP.
  - Budget Submission DB (Talitha Lindo)
    - Answered a question from Rebecca Muse about someone who was locked out of notes. Not application specific, but person was intending on accessing BS database.
  - Recertification Database [2016] (Joe Layman)
    - Setup 2016 database and turned on nightly data download.
  - Data Call and Response [RPROS]
    - Janet had some questions about accessing a particular data call. She was concerned that people who were not allowed to post responses actually could. She was seeing the button because she is a DBAdmin. Explained this was by design.
  - Training Enrollment (Richard Blackman)
    - Some people could not access the training registration because they were having problems accessing the database due to DNS issues. This was a left over issue from when the server was moved to RTP. This is not an issue I can fix, but I did present the workaround where you can access the database via the server IP address the first time. After that, DNS entries start working again.

### *Work Planned (November 1st - November 30th)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Support of existing databases.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (October 1st - October 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (November 1st - November 30th)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (October 1st - October 31st)*

- Migrated file server from Windows 2003 to hosted VM running Windows 2012 at Potomac Yard. (Weekend of October 9<sup>th</sup>) BAS working and users can access all file shares. We have turned off the old file server and plan to surplus the server (sitting in Potomac Yard datacenter) next month.
- We have requested a standard Win7 Enterprise image be created on the MDT server for our Toshiba Satellite laptops. An OCFO OB Staging OU has been created in active directory to facilitate the deployment of the image. The COTS team is in the process of building the image. Eric has secured Windows licenses for those machines.
- End user support and software updates pushed via Big Fix management agents.
- ADC IPv6 testing and configuration work and meetings. Any device that reaches out to the Internet for communication will require a dual stack (IPv4 and IPv6) configuration. All applicable servers and 1 COOP laptop are configured in dual stack. After the hardware refresh is complete, I will push the dual stack configuration to the other 3 laptops. At this point we are 40% complete.
- Provided end user desktop support.
- Assist BAS end users with desktop shortcut updates.
- Troubleshoot Citrix performance problems. At times, one user's IE process on the server consumes ~50% of the processor resources.
- Ongoing management and maintenance of all physical servers and server VMs.
- Upload nightly BAS backups to OneDrive online storage.
- Backup verification and space management. NAS still has adequate space.
- Review InfraView reporting/logs for server errors and items that require maintenance.

Eric and I are working on a plan for showing that logs are reviewed and problems remediated.

- Working with Tracy surplus old desktops, laptops and servers. We are at a standstill at this point because we did not receive a receipt that individuals picked up the last batch of equipment.
- Recommended new desktop multi-function printers for Tracy and Michelle. The printers are mono-chrome laser machines with high capacity toner cartridges.

*Work Planned (November 1st - November 30th)*

- Continue providing routine project management oversight.
- Reimage 4 new COOP laptops with EPA Windows 7 Enterprise when the COTS team completes the image build.
- Stand up new server and install Everything Helpdesk.
- Work to resolve the iexplorer.exe process (performance) problem on the Citrix server.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

*Client Actions/Decisions Required*

- Comment on SLCM documentation changes needed for future releases.

*Work Performed (October 1st - October 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued to review the BFS DR plan.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests and prepared test scripts for use by Selenium automated test tool.
  - Incorporated EPA comments and prepared final QMP.
  - Reviewed document related to best practices in federal budgeting.
- Design and Review meetings:
  - Internal discussions and meetings with EPA on Org xwalk process, user security, and data migration between various databases.
  - Completed design of Allocations.



- Developed an approach to replace the Allocating function with a linking process; users will now test and develop rules for allocating supporting costs without having to calculate breakouts first.
- Continued work on where to inject agency specific custom code in complex BFS modules.
- Save As New Base Cost function discussions.
- Initial discussion on adding applied filters to label/adjustment factors in Modeling.
- Continuing discussion on data conversion and storage for Model Source and Model Base details.
- Continuing discussion on the way Rule Sets for Modeling should be stored in.
- Worked on the following ETL processes: Fact Budget Resources, Fact Key Program Resources, Fact Target Resources, PRC, Allocation Rulesets, Allocation Rules.
- Created User crosswalk table and ETL for that for key program data.
- Did ETL and QA for 336 versions for Fact Budget Resources; Troubleshooting of related issues.
- Updated Short Titles and Long Titles in relevant databases for RPIO, AH.
- Identified and created the missing PRCs for 46 budget and key program versions.
- Created structures (tables, keys, constraints) for Allocation process.
- Had discussions and meetings internally and with clients on Org xwalk process, User security, data migration between various databases, addition of Country State Tribe column, relevant Target and Key Program versions.
- Investigated and found the cause for the issue with applied version and scenario data.
- Cleaned up and did QA for dimensions and budget version fact data.
- Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same.
- Data Capture:
  - Continued working on data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
  - Completed building database objects needed to support Key Programs and Target Resources reporting processes.
- System development and support:
  - Finished adding metadata for Target and Key Program version grids
  - Fixed the issue with Reference Data operations for County State Tribes table.
  - Implemented Save As New Base Cost functionality in Modeling.
  - Performed code cleanup for BFS release 1.1.
  - Analysis and started working on adding filters to adjustment labels/factors in Modeling.
  - Fixed the error on copying data to projection version in Modeling.
  - During conversion of Scenarios from BAS to BFS it was discovered that additional columns have to be added to new BFS modeling objects and metadata to support data needs heretofore hidden within the complex crosswalks

- Fixed the issue with dropdowns in Reference Data module caused by some code moved to different java script files.
- Started working on filtering of the Version Selector by Version Type and additional filters as well.
- Worked on figuring out which rulesets for ESP Allocations should be moved from BAS to BFS.
- Created metadata for 6 screens used in Allocations.
- Created metadata for (approximately) 20 grids used in Allocations.
- Designed, coded, and tested stored procedures for updating and tracking allocation process state.
- Designed, coded, and tested stored procedures to perform breakout calculations.
- Designed, coded, and tested stored procedures to assign allocation rules to supporting program resources.
- Continued to work on processes for more rapid QA and correction of metadata.
- Continued on creation of metadata load processes and procedures.
- Completed metadata entry for the Target Resources grid.
- Continued created metadata for allocations grids.
- Continued working on CRUD procedures to capture rules data for Allocations.
- Worked on breakouts calculation process for ESP Allocations.
- Worked on shakeout of the Fact Target Resources RDE screen.
- Worked on supporting the shakeout of the implementation of Key Program Resource Reports.
- Created a stub for the view to be used for ESP Allocation reports.

*Work Planned (November 1st - November 30th)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to prepare SLCM documentation.
- Continue to work on system testing and implementation.
- Finish all generated code and objects to support multi row updates for Key Programs and Target versions.
- Finish required metadata to support ad-hoc reports for Key Programs and Target versions.
- Ongoing work to implement pattern-based metadata maintenance.
- Design approach to saving filters used in modeling.
- Data Capture:
  - Finish back end work to support ESP Allocations.
  - Finish metadata adds for the Allocation Reporting Module.
- System development and support:
  - Finish building out all structures needed to support the ESP Allocations process
  - Continue working on the Items on the UAT results list.
  - Finalize Fund/Approp/Subapprop Reference Data creation.
  - Finish implementing filtering logic for Version Selector.
  - Complete SQL Build logic.

- Continued work on identifying metadata patterns and implementing processes to automate metadata management.
- Continue working on standardizing screen appearance in different modules.
- Complete work on adding a way to save and display Filter used for applying certain adjustment/factor combination in Modeling.
- Shakeout problems and testing of the Target Resources Grid.
- Continue with design of custom code injection to prevent hard codes from making BFS generally usable by all agencies.
- Work with application developers to make the merge forward user error be handled in bulk data validation rather than with a mysterious error message.

## PROJECT DELIVERABLES

For the reporting period October 1<sup>st</sup> – October 31<sup>st</sup> 2015

<b>Deliverable</b>	<b>Date</b>
Hill Reports (Hill Technical Monthly 10_2_2015.xlsx) (Hill Technical Monthly 10_2_2015 (with codes).xlsx) (Quarterly Hill 10_2_2015.xlsx)	10/2/2015
September 2015 project status and cost reports (EPA-CFO_September_2015_Status.doc, EPA OCFO BAS cost report September 2015.xlsx)	10/13/2015
Hill Quarterly 2015 ACT 14.0 (Quarterly Hill 10_15_2015 14 <sup>th</sup> month.xlsx)	10/15/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report November 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**December 11, 2015**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (November 1st - November 30th)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (December 1st - December 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

*Work Performed (November 1st - November 30th)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, update or create action items based on info that came out of the meetings.
- Continued to update the document that describes the process to use the One Drive for getting backups to KeyLogic.

*Work Planned (December 1st - December 31st)*

- Schedule a Disaster Recovery exercise.
- Additional testing needs to be done to finalize the process for EPA Oracle backups.
- Continue to update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Schedule a Monthly Status meeting.

**Subtask 1.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

*Work Performed (November 1st - November 30th)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Provided users the explanation on consequences on changing NPM short\_titles.
- Support on ESP Allocation problems – all figured out and task completed.
- Provided the information about the records with no program\_flag in the breakout version used for Allocation process to the client.
- Created spreadsheet for the NO ACCESS versions in BAS to BFS Analyst per his request.
- Added rules to current ruleset for ESP Allocation rules per client’s request.
- Created spreadsheets with current version accesses downtown.
- Created a document with the information about all current Allocation adhoc and standard reports in BAS for the BFS analysts/developers.
- Provided the list of current AH reserves in BAS to the BFS analyst.
- Provided the spreadsheet with the versions in BAS currently having mixed VIEW and EDIT accesses to the BFS analyst.
- Created four spreadsheets of performance data for 4 different drivers to be used in a complex performance graphic per client’s request.

- Found the issue with 6.0 driver not being linked to versions in Performance module in BAS, fixed the issue.
- Provided a list of versions created at EPA in November per BFS analyst's request.
- Participated in the creation of the document outlining BAS milestones over the years per client's request.
- Provided the information on the Stored Procedures calls used in BAS resources Import process per SQL Server developers request.
- Fixed ESP Allocation error on checking the status of the breakout calculations.
- Supported users (Dominic Nelson) in providing Oracle TNS Names entry.

*Work Planned (December 1st - December 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue providing support to BAS/PERS/ACS users.

**Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (November 1st - November 30th)*

- KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (December 1st - December 31st)*

- KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

**Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (November 1st - November 30th)*

None

*Work Planned (December 1st - December 31st)*



- KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

### **Subtask 1.8 Documentation**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (November 1st - November 30th)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

#### *Work Planned (December 1st - December 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

### **Subtask 1.9 - Database Security**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (November 1st - November 30th)*

None

#### *Work Planned (December 1st - December 31st)*

- Maintain BAS database security as necessary.

### **Subtask 1.10 - BAS System Integration with Other Administrative Systems**

#### *Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

#### *Work Performed (November 1st - November 30th)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Set up test server at EPA to connect to test server at FEEDMOM.
- Ran file uploads to help test the connection and test path.

#### *Work Planned (December 1st - December 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.

### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

#### *Client Actions/Decisions Required*

- None

#### *Work Performed (November 1st - November 30th)*

- None

#### *Work Planned (December 1st - December 31st)*

- Enhance ACS/PERS functionality and assisting in ACS/PERS data analysis, if requested.
- Decision pending on adding the ability to copy of Bids across FY within the same Strategic Plan.
- Meet with EPA about proposed addition of PM Targets to PERS tables on measure creation or on alternatives, if requested.
- Discuss with EPA PERS client changes the BAS team suggested to the PERS initial screen; set up discussion with EPA client for approval and explanation, if requested.

### **Subtask 2.6 Acceptance Testing**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (November 1st - November 30th)*

None

#### *Work Planned (December 1st - December 31st)*

None

### **Subtask 2.7 Training**

No activity during the reporting period.

### **Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (November 1st - November 30th)*

- None

*Work Planned (December 1st - December 31st)*

- Continue efforts to develop and revise system documentation, if requested.

### **Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (November 1st - November 30th)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports (into 2015 ACT 12.0).
- Did loads for 2015 ACT 16.5 (133 Obligation changes and loads).
- Worked on 2016 nightly import changes.
- Worked on answering SNC audit questions.
- Worked on 2015 ACT 16.5 load for 133 Obligations.
- Worked on knowledge-transition to team-members for BAS nightly import, SNC.
- Continued working on maintenance and infrastructure tasks such as password changes, security issues, connectivity on CDW, BAS SQL Server, F5, BAS Oracle server.

*Work Planned (December 1st - December 31st)*

- Continue to support budget/finance related reports, as requested by client.

## **Task 4: Data Warehousing Support**

### *Client Actions/Decisions Required*

None

### *Work Performed (November 1st - November 30th)*

None

### *Work Planned (December 1st - December 31st)*

- Support OCFO staff as requested.

## **Task 5: Administrative Database Application Development and Maintenance**

### *Client Actions/Decisions Required*

- None

### *Work Performed (November 1st - November 30th)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - General:
    - Worked with Eric Kim and Jackye Herzfeld to figure out why my EPA email ID was deleted and get it restored.
    - Changed bas\_user password for all databases that connect to COMPASS to download data.
  - Data Call and Response [RPROS] (Aaron Staniszewski)
    - Debugged and corrected a problem with Judy Lieberman's ability to create Data Call Responses. The problem was related to her ability to create the KeyLogic folder in her My Documents area of her computer.
    - Answered some questions about database use from Jackye and Janet.

### *Work Planned (December 1st - December 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Support of existing databases.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (November 1st - November 30th)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (December 1st - December 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (November 1st - November 30th)*

- Installed and configured everything Helpdesk.
- MDT Win7 Enterprise image has been created for the Toshiba Satellite laptops and we began testing the installation.
- End user support and software updates pushed via Big Fix management agents.
- ADC IPv6 testing and configuration work and meetings. Any device that reaches out to the Internet for communication will require a dual stack (IPv4 and IPv6) configuration. All applicable (one) servers and 2 COOP laptop are configured in dual stack. As of the end of November, we are 100% configured.
- Provided end user desktop support.
  - Installed new printers for Tracy and Michelle.
  - Provided post refresh OCFO BAS installation/configuration support.
  - Provided post refresh OCFO custom software installation support.
  - Provided post refresh OCFO printer installation/configuration support.
- Created BAS Test application in Citrix that points to the Oracle Test server, for the purpose of testing the new CVE reprogramming.
- Ongoing management and maintenance of all physical servers and server VMs.
- Upload nightly BAS backups to OneDrive online storage.
- Backup verification and space management. NAS still has adequate space.
- Review Infra View reporting/logs for server errors and items that require maintenance. Eric and I are working on a plan for showing that logs are reviewed and problems remediated.
- Working with Tracy surplus old desktops, laptops and servers. Started removing hard

disks from surplus identified hard drives. Once complete, will degauss all disks and certify them as wiped prior to surplus/turn in.

*Work Planned (December 1st - December 31st)*

- Obtain static IP address for the server running everything Helpdesk.
- Complete testing and reimaging of the 4 new COOP laptops with EPA Windows 7 Enterprise.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

*Client Actions/Decisions Required*

- Comment on SLCM documentation changes needed for future releases.

*Work Performed (November 1st - November 30th)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued to review the BFS DR plan.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests and prepared test scripts for use by Selenium automated test tool.
- Design and Review meetings:
  - Completed design of Allocations reports.
  - Continuing discussion on data conversion and storage for Model Source and Model Base details with the consideration of the new additional columns to match the structure with the resources structure.
  - Continuing discussion on the way Rule Sets for Modeling should be stored in.
  - Worked on the following ETL processes: Fact Budget Resources, Fact Key Program Resources, Fact Target Resources, PRC, Modeling structures, Allocation Rulesets, Allocation Rules, Org xwalk (Org, RPIO, AH, RCenter, SubRCenter), Detailed Costs, Country State Tribe.
  - Completed conversion of Allocation Rules and rulesets data from BAS to BFS.
  - Discussed and finalized changes to Target versions data.
  - Completed changes for modeling columns for ACS and reran the ETL to get the latest and correct data.
  - Updated Org xwalk and constituent data.

- Created structures (tables, keys, constraints) for Allocation process.
- Had discussions and meetings internally and with clients on Org xwalk process, User security, data migration between various databases, addition of Country State Tribe column, relevant Target and Key Program versions.
- Worked on knowledge-transition to team-members for ETL for Budget versions and Org xwalk
- Cleaned up and did QA for dimensions and budget version fact data.
- Analyzed and tested the data for accuracy and adherence to requirements; resolved issues for the same.
- Data Capture:
  - Continued working on data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
  - Continued building database objects needed to support Target Resources reporting processes.
  - Completed shake-out of allocations screens and stored procedures.
- System development and support:
  - Finished adding metadata for Target version grids.
  - Filtering on Version Types in Version Selector completed and implemented on the screens.
  - Implemented Special Filtering (like Allocation versions) in Version Selector.
  - Worked on Error Handling for Save As New functions in Modeling.
  - Modeling structure changes for matching Resources were implemented and tested.
  - Found duplicate codes in Refdata County State Tribes and reported to SQL Server developers.
  - Provided an explanation on how the Version Selector is working to reflect the selected version change to satisfy Janet's comments.
  - Participated in ESP Allocation testing – issues sent to appropriate developers.
  - Created metadata for Allocations reports.
  - Continued to work on processes for more rapid QA and correction of metadata.
  - Continued on creation of metadata load processes and procedures.
  - Continued created metadata for allocations grids.
  - Continued working on CRUD procedures to capture rules data for Allocations.
  - Continued working on breakouts calculations process for ESP Allocations.
  - Worked on shakeout of the Allocation screens.
  - Worked on the view to be used for ESP Allocation reports.

*Work Planned (December 1st - December 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to prepare SLCM documentation.
- Continue to work on system testing and implementation.
- Data Capture:
  - Finish back end work to support ESP Allocations.



- Finish metadata adds for the Allocation Reporting Module.
- System development and support:
  - Complete backend work to support the ESP Allocations process.
  - Continue working on the Items on the UAT results list.
  - Finalize Fund/Approp/Subapprop Reference Data creation.
  - Complete SQL Build logic.
  - Continued work on identifying metadata patterns and implementing processes to automate metadata management.
  - Continue working on standardizing screen appearance in different modules.
  - Complete work on adding a way to save and display Filter used for applying certain adjustment/factor combination in Modeling.
  - Shakeout problems and testing of the Target Resources Grid.
  - Continue with design of custom code injection to prevent hard codes from making BFS generally usable by all agencies.
  - Work with application developers to make the merge forward user error be handled in bulk data validation rather than with a mysterious error message.

## PROJECT DELIVERABLES

For the reporting period November 1<sup>st</sup> – November 30<sup>th</sup> 2015

<b>Deliverable</b>	<b>Date</b>
October 2015 project status and cost reports (EPA-CFO_September_2015_Status.doc, EPA OCFO BAS cost report October 2015.xlsx)	11/13/2015
2015 Hill Quarterly Year-End 16.3 (PP51 Quarterly Hill 11_24_2015.xlsx)	11/24/2015

# **BUDGET SYSTEMS SUPPORT FOR EPA OCFO**

## ***Project Report December 2015***

**CUSTOMER: U.S. Environmental Protection Agency -  
Office of the Chief Financial Officer**

Contract No. GS-35F-0151L

Task Order No. EPG12H00434

***Submitted By:***



KeyLogic Systems, Inc.  
3168 Collins Ferry Road  
Morgantown, WV 26505

***Date Submitted:***

**January 19, 2016**

## **Task 1: Budget Automation System Design, Development, and Maintenance**

### **Subtask 1.1 System Specifications**

No activity during the reporting period.

### **Subtask 1.2 Prepare System Development Life Cycle Development Analyses**

#### *Client Actions/Decisions Required*

None

#### *Work Performed (December 1st - December 31st)*

KeyLogic continued analyzing requirements/problems for BAS, as requested, including;

- BAS-Compass interface process.
- Actuals import process (CDW to BAS).
- Maintaining/troubleshooting Citrix virtual application solution for BAS.
- Miscellaneous system enhancement requests (see Subtask 1.5).

#### *Work Planned (January 1st - January 31st)*

KeyLogic will continue to analyze BAS issues, including:

- BAS-Compass interface process.
- Supporting Citrix virtual application solution for BAS.
- BAS system performance issues.
- Issues reported by OCFO staff and other BAS users.
- Updates and improvements to the automated data transfer between the CDW/Momentum and BAS, as necessary or requested.
- Other BAS modifications and enhancements, as requested.

### **Subtask 1.3 System Development**

No activity during the reporting period.

### **Subtask 1.4 System Security and Disaster Recovery**

#### *Client Actions/Decisions Required*

No activity during the reporting period.

*Work Performed (December 1st - December 31st)*

- Continued updating the configuration diagram for controlling the backup process.
- Continued to create agendas, schedule and attend DR and backup update meetings, update or create action items based on info that came out of the meetings.
- Continued to update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Schedule a Disaster Recovery exercise.

*Work Planned (January 1st - January 31st)*

- Schedule a Disaster Recovery exercise.
- Additional testing needs to be done to finalize the process for EPA Oracle backups.
- Continue to update the document that describes the process to use the One Drive for getting backups to KeyLogic.
- Schedule a Monthly Status meeting.

**Subtask 1.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- Need to discuss with users of the reprogramming partial copy function exactly how the process should work before we re-enable.
- Decision needed from EPA on allowing “collider” overwrite functionality on Key Program imports.
- KeyLogic would like to further discuss PERS measures.

*Work Performed (December 1st - December 31st)*

KeyLogic responded to EPA requests for BAS enhancements, including:

- Participated in changing NPM short\_titles/ Bidding Offices.
- Created 3 spreadsheets – one for AH type users with their AHs, the other one for NPM type users with their NPMs, and the third one for all users with their RPIOs. All three spreadsheets contained info on the groups and accesses to BAS.
- Created a document that describes how Program Area data is captured and reported against in BAS per analyst’s request, also a list of users in BAS that have RPIOs from the reserves list listed as their RPIOs.
- Created spreadsheets with current version accesses downtown.
- Provided support on PERS data entry and accesses to 2010-2014 data.
- Provided support to BAS users for saving Adhoc Reports and data into spreadsheets.
- Provided support to BAS users on accessing Program Project/ Performance linking screen.

- Versions linking to the driver and PERS FY/version linking for macro 8 years performance report.
- Created new congressional reports (RPM-NOA2016 and RPM-CO2015) and incorporated into BAS Standard reports module.
- Participated in testing of the Import files created using BFS data into BAS.

*Work Planned (January 1st - January 31st)*

- Continue enhancing BAS, as requested.
- Continue supporting BAS-Compass interface activities.
- Continue testing the EPA Test server Oracle upgrade.
- Continue providing support to BAS/PERS/ACS users.

**Subtask 1.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (December 1st - December 31st)*

- KeyLogic continued testing BAS features as system functionality was enhanced or developed.

*Work Planned (January 1st - January 31st)*

- KeyLogic will continue testing BAS until all identified errors have been resolved and as new system functionality is implemented.

**Subtask 1.7 Training**

*Client Actions/Decisions Required*

None

*Work Performed (December 1st - December 31st)*

None

*Work Planned (January 1st - January 31st)*

- KeyLogic will work with client staff to develop training documents in support of BAS training, as requested. We will provide on-site support of BAS training sessions at the request of client staff.

## **Subtask 1.8 Documentation**

### *Client Actions/Decisions Required*

None

### *Work Performed (December 1st - December 31st)*

- Continued supporting BAS on-line help functionality and content.
- Continued updating the BAS user guides as necessary to reflect system functionality modifications. Continued supporting conversion of the BAS User Guides and the PERS/ACS User Guides and various help documents into a PDF format for use on the OCFO website.
- Continued maintaining BAS change control log.

### *Work Planned (January 1st - January 31st)*

- KeyLogic will work with client staff to develop documentation in support of BAS, as requested.
- Develop “BAS Bytes” documents, if requested, describing new BAS features or functionality.
- Continue analyzing and improving/documenting the EPA/BAS Disaster Recovery (DR) process, as time and priorities permit:
  - Work to finalize the process to eliminate the need for sending DVDs to KeyLogic, making the backups available to KeyLogic by way of access to the SAN, so that BAS database refreshes can be transferred electronically when needed.
  - Meet to identify and discuss any outstanding DR issues and resolve them.
  - Once all issues are resolved, and processes finalized, make changes to the SCD and DR Plan reflect the process resolutions.

## **Subtask 1.9 - Database Security**

### *Client Actions/Decisions Required*

None

### *Work Performed (December 1st - December 31st)*

None

### *Work Planned (January 1st - January 31st)*

- Maintain BAS database security as necessary.

## **Subtask 1.10 - BAS System Integration with Other Administrative Systems**

### *Client Actions/Decisions Required*

- Response to change request to allow partial reprograms to be loaded to Compass.

### *Work Performed (December 1st - December 31st)*

- Continued working on BAS-Compass interface issues.
- Continued to monitor the nightly Actuals import process, notifying client of import status and correcting problems when necessary.
- Continued analyzing/modifying the nightly FY 2015 Actuals import process logic as requested.
- Continued supporting tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).

### *Work Planned (January 1st - January 31st)*

- Continue working with client staff to resolve any identified issues with the nightly automated CDW-BAS FY 2015 Actuals import process, including issues with source data quality, data query modifications, and translation/transformation logic.
- Continue to load and test the latest ETL code in the EPA production environment as necessary to support modifications to the nightly CDW data import.
- Continue supporting annual/quarterly tasks to prepare budget and financial data for required reporting (e.g. Statement of Net Costs, PAR, SF133, etc.).
- Continue to push to get F5 access to BAS Test server – changing the production server to point to FEEDMOM test leaves us open for errors and also makes “real” uploads impossible during testing.
- Continue supporting BAS-Compass interface activities.

## **Task 2: Performance Module System Design, Development and Maintenance**

### **Subtask 2.1 System Specification Review**

No activity during the reporting period.

### **Subtask 2.2 Prepare System Development Life Cycle Development Analyses**

No activity during the reporting period.

### **Subtask 2.3 System Development**

No activity during the reporting period.



### **Subtask 2.4 System Security and Disaster Recovery**

No activity during the reporting period.

### **Subtask 2.5 Enhancing System Functionality**

*Client Actions/Decisions Required*

- None

*Work Performed (December 1st - December 31st)*

- Multiple PERS versions accesses modifications as well as linking versions to Fiscal years.

*Work Planned (January 1st - January 31st)*

- None

### **Subtask 2.6 Acceptance Testing**

*Client Actions/Decisions Required*

None

*Work Performed (December 1st - December 31st)*

None

*Work Planned (January 1st - January 31st)*

None

### **Subtask 2.7 Training**

No activity during the reporting period.

### **Subtask 2.8 Documentation**

*Client Actions/Decisions Required*

None

*Work Performed (December 1st - December 31st)*

- None

*Work Planned (January 1st - January 31st)*

- Continue efforts to develop and revise system documentation, if requested.

**Task 3: Financial and Other Reporting Requirement Support**

*Client Actions/Decisions Required*

None

*Work Performed (December 1st - December 31st)*

- Continued supporting annual/quarterly budget/finance reporting processes and data quality issues including – Hill Monthly reports.
- Did Oct and Nov month-end loads into 2016 ACT 1.0 and 2.0.
- Continued working on maintenance and infrastructure tasks such as password changes, security issues, connectivity on CDW, BAS SQL Server, F5, BAS Oracle server, Nightly imports Oracle client issue.

*Work Planned (January 1st - January 31st)*

- Continue to support budget/finance related reports, as requested by client.

**Task 4: Data Warehousing Support**

*Client Actions/Decisions Required*

None

*Work Performed (December 1st - December 31st)*

None

*Work Planned (January 1st - January 31st)*

- Support OCFO staff as requested.

## **Task 5: Administrative Database Application Development and Maintenance**

### *Client Actions/Decisions Required*

- None

### *Work Performed (December 1st - December 31st)*

- Continued to provide Lotus Notes expertise in support of multiple database applications, including:
  - General:
    - Finally got my EPA email access restored. Worked on getting my forwarding setup and access to my EPA login ID.
  - CATD Database (Lorna Washington)
    - Looked into a problem for Lorna but database was functioning as expected.
  - OB Main Menu (Rebecca Muse)
    - Answered some questions about database use from Rebecca. She had a user (Lili Wang) who could not access the database. Seemed she had a problem with her Lotus Notes ID File.
  - Recertification Database (Pat Wingfield)
    - Pat said she was having a problem exporting data from the database. Process works for me and other users. Appears to be something with Pat's PC. Did not hear a final resolution as of yet.

### *Work Planned (January 1st - January 31st)*

- Continue to provide Lotus Notes expertise in support of budget-related applications, as requested, including, but not limited to:
  - Support of existing databases.

## **Task 6: Hardware/Software/Peripheral Purchases/Installation**

### *Client Actions/Decisions Required*

None

### *Work Performed (December 1st - December 31st)*

- Installed BAS front-end files and ran database scripts on EPA's servers as necessary to implement system modifications.

### *Work Planned (January 1st - January 31st)*

- Install BAS front and back end as necessary to implement system revisions.

## **Task 7: Project Management/Technical Assistance**

### *Client Actions/Decisions Required*

None

### *Work Performed (December 1st - December 31st)*

- Troubleshoot Citrix problem involving multiple open active sessions per user.
- End user support and software updates pushed via BigFix management agents. Attended security patching call with server admins to discuss EPA wide BigFix patching of servers. Discussed which patches are necessary and exploring if non-applicable patches are being counted as not being applied. Will continue discussion again in January.
- Provided end user desktop support.
  - Installed local BAS for Ryan King and Venus Reyes
  - Assist Peter Dragon tech support with installing/configuring local BAS.
  - Assist Bob Reck with password reset.
  - S: Drive down. Restarted file server.
  - Applied new BAS release on 12/23.
  - Assist Laura Ripley with mail application defaults.
- Ongoing management and maintenance of all physical servers and server VMs.
- Upload nightly BAS backups to OneDrive online storage. Ensure backups are uploaded on a nightly basis, even when offsite, and completed before 8 am each morning.
- Backup verification and space management. NAS still has adequate space.
- Review InfraView reporting/logs for server errors and items that require maintenance. Eric and I are working on a plan for showing that logs are reviewed and problems remediated.
- Working with Tracy surplus old desktops, laptops and servers. Consolidated remaining surplus equipment in room closer to Tracy.
- Dismantled approximate 180 hard drives. Some drives were 15-20 years old. Sanitized the internal disks with NSA approved degaussing magnet. Disks are in with other equipment for surplus turn-in. Filled 4 moving boxes with the hard disk housings, labelled as “techno trash” and had facilities pick up for metal recycling.
- Pack up materials and equipment in Vijay’s cube in preparation for upcoming move to new area.
- Touched base with Greg Wadsworth regarding moving of remaining servers to Potomac Yard data center. Dark fiber is not installed yet between HQ and PY. ETC is end of January. Informed him that we will not move the servers until the connection is updated.

### *Work Planned (January 1st - January 31st)*

- Load MDT Windows 10 image on one of the COOP machines to assist with testing and use agency wide.
- Construct plan for migrating remaining servers to Potomac Yard.
- Sit with Eric and go through boxes of old equipment, books and accessories. See if the majority can be disposed.
- Attend IPv6, BigFix patching and MDT meetings.

## **Task 8: Web-Enabling our Current Client-Server Application (Optional)**

### *Client Actions/Decisions Required*

- Comment on SLCM documentation changes needed for future releases.

### *Work Performed (December 1st - December 31st)*

- Continued planning and development activities for BFS application, including:
  - Continued internal meetings to explore design options for the new system.
  - Continued maintaining and modifying the development framework in the KeyLogic environment.
- Conducted numerous meetings and discussions about DB structure, requirements, and user interface functionality.
- Continued to review the BFS DR plan.
  - Reviewed for internal use EPA's design and requirements documents for Performance module.
- Continued developing EPA SLCM documents required to pass Control Gates 3 and 4:
  - Prepared for internal use documents in support of BFS deployment outside of EPA.
  - Prepared for internal use user acceptance testing documents.
  - Prepared training materials on various modules.
  - Performed BFS integration tests and prepared test scripts for use by Selenium automated test tool.
- Design and Review meetings:
  - Completed design of Allocations reports.
  - Continuing discussion on data conversion and storage for Model Source and Model Base details with the consideration of the new additional columns to match the structure with the resources structure.
  - Continuing discussion on the way Rule Sets for Modeling should be stored in.
  - Worked on the following ETL processes: Fact Budget Resources, Fact Key Program Resources, Fact Target Resources, Modeling structures.
  - Worked on converting modeling ETL from SSIS packages to stored process.
  - Worked on adding No Year logic to existing ETL processes.
  - Worked on adding RPIO 20 special RpioDefined1 logic to existing ETL processes.
  - Worked on adding the NULL RPIODefined1 logic for 1 Key Program version.

- Trained team-member on existing ETL logic and processes.
- Added logic to drop and recreate constraints, truncate tables to existing ETL packages.
- Worked with client on adjusting and fine tuning transformation rules for loading and extracting from BFS.
- Extracted a number of budget versions from BFS and loaded to BAS.
- Optimized BFS ETL packages for Azure environment.
- Created a script to add a Fund-Subapprop-Approp to BFS.
- Consolidated scripts for moving data from staging to other databases.
- Had discussions and meetings internally and with clients.
- Data Capture:
  - Continued working on data cleanup to have a database instance with clean data that will be delivered to the client on the first drop.
  - Continued building database objects needed to support different Resources reporting processes.
  - Worked on allocations reports.
- System development and support:
  - Version Selector – change made to disallow selection of the version that was made ‘NO ACCESS’ by the Super user when regular user is already logged on.
  - Created multiple spreadsheets with the Version Accesses.
  - Worked on the incorporation of the Approp, Fund Tree and Fund Structure Tree into RefData module.
  - Fixed the issue analysts found – Version Management opened after the module where Version Selector was filtered by Version Type and Clear filter was clicked was reflecting that filter by Version Type.
  - Modeling/Allocation Data crosswalking analysis and corresponding review on how “Is Deleted” is working on Modeling Data. This needs some fixes.
  - Fixed the issue with version code .NN – the workaround was to create a 0.NN but now it is OK to just type .NN
  - Added code to not allow creation of FY with literals.
  - Created the list of versions with the 3 groups (NPM, AHR, OC) accesses for each group. This was created per analysts request as a second step after the version security by version status is applied.
  - Continued to work on processes for more rapid QA and correction of metadata
  - Continued on creation of metadata load processes and procedures
  - Continued created metadata for allocations reports
  - Continued worked on shakeout of the Allocation screens.
  - Continued worked on the view to be used for ESP Allocation reports.
  - Began adding metadata for the allocation reports

*Work Planned (January 1st - January 31st)*

- Continue planning/development activities and maintain project schedule.
- Continue working on features for BFS as per the requirements.
- Continue to support efforts related to BFS deployment outside EPA.
- Continue to prepare SLCM documentation.

- Continue to work on system testing and implementation.
- Automate ETL packages for future runs.
- Execute BFS loads and extracts upon request.
- Data Capture:
  - Implement queuing mechanism to have long running processes run asynchronously. Allocations rule assignments and breakout calculations are the first two of such long running processes to be so implemented.
  - Complete back end work to support ESP Allocations screens and reports
  - Complete database support for the Allocation Reporting Module
  - Complete database support for the Fund incorporation into RefData Module.
- System development and support:
  - Continue working on the items on the UAT results list.
  - Finalize Fund/Approp/Subapprop Reference Data creation.
  - Complete SQL Build logic.
  - Continued work on identifying metadata patterns and implementing processes to automate metadata management.
  - Continue working on standardizing screen appearance in different modules.
  - Complete work on adding a way to save and display filter used for applying certain adjustment/factor combination in Modeling.
  - Shakeout problems and testing of the Target Resources Grid.
  - Continue with design of custom code injection to prevent hard codes from making BFS generally usable by all agencies.
  - Work with application developers to make the merge forward user error be handled in bulk data validation rather than with a mysterious error message.

## PROJECT DELIVERABLES

For the reporting period December 1<sup>st</sup> – December 31<sup>st</sup> 2015

Deliverable	Date
November 2015 project status and cost reports (EPA-CFO_November_2015_Status.doc, EPA OCFO BAS cost report November 2015.xlsx)	12/11/2015
Additional Lines for the Quarterly, Monthly Hill Technical w/codes Quarterly Hill, Monthly Hill Technical w/codes and extra lines (Additional Lines for the Quarterly.xlsx) (Hill Technical Monthly 12_15_2015 (with codes).xlsx) (Quarterly Hill 12_14_2015.xlsx) (Hill Technical Monthly 12_15_20015 (with codes)-Extra Lines.xlsx)	12/15/2015
Front-end files containing modifications to CO2015 report (basbuild_12232015_basrpts.zip)	12/23/2015